Perceptions of public service speech-language therapists in the Western Cape regarding early communication intervention

by
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Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

March 2021

Abstract

Objectives:

This qualitative research study aimed to investigate the perspectives of Speech-Language Therapists (SLTs) providing early communication intervention (ECI) services within the multicultural and multilingual environment of the Western Cape public healthcare sector.

Background:

Communication delays and disorders are the most common impairment in early childhood. Appropriate and early intervention can limit the negative impact of such impairments across the child's lifespan. Little research knowledge is available regarding the nature of ECI services in the South African public health sector. Therapists' perceptions can be valuable in understanding the facilitators, challenges, and opportunities to good quality ECI services.

Method:

Data was collected by means of semi-structured interviews with 7 speech-language therapists using an interview guide. Each interview was recorded and then transcribed verbatim. Finally, open coding was applied to the transcripts, and findings emerged in the form of several themes and subthemes.

Findings:

The main findings that emerged from the study were; the main differences between the current and ideal ECI; challenges and facilitators to ECI service delivery; and achieving ideal ECI service delivery. Several recommendations were made by the participants, including a renewed emphasis upon training candidates that represent the cultural and linguistic characteristics of the communities that they serve; revision of policies regarding the availability of posts; and use of a group therapy approach where possible.

Conclusion:

The findings of this study represent a clear contrast between the current realities that ECI interventionists face and the ideal service delivery to which they strive. Several recommendations were made by the participants in the light of these findings, especially with regards to the current needs and disparities evident in the field of ECI in the public sector.

Uittreksel

Doelwit:

Hierdie kwalitatiewe navorsingsstudie het beoog om die perspektiewe van spraak-taalterapeute (STTe) wat vroeë kommunikasie intervensie (VKI) dienste in die multi-kulturele en veeltalige omgewing van die Wes-Kaap se publieke gesondheidsorgsektor lewer, te ondersoek.

Agtergrond:

Die mees algemene afwyking in die vroeë kinderjare is ‘n kommunikasie agterstand. Toepaslike en vroeë intervensie kan die negatiewe impak van so ’n agterstand oor die kind se lewensduur beperk. Beperkte navorsingskennis is tans beskikbaar in verband met die aard van VKI dienste in die Suid-Afrikaanse publieke gesondheidsorgsektor. Terapeute se insig kan waardevol wees om die fasiliteerders, uitdagings, en geleenthede tot goeie gehalte VKI dienste te verstaan.

Metode:

Data is ingevorder deur middel van ‘n onderhoudsgids tydens semi-gestruktureerde onderhoude met 7 spraak- taal terapeute. Elke onderhoud is opgeneem en daarna “verbatim” getranskribeer. Die metode van “oop kodering” was toegepas op die transkripte, en bevindinge het na vore gekom in die vorm van verskeie temas en sub-temas.

Bevindinge:

Die hoof bevindinge wat na vore gekom het was; die hoof verskille tussen huidige en die ideale VKI; uitdagings en fasiliteerders tot VKI dienslewering; en bereiking van ideale VKI dienslewering. Verskeie aanbevelings is deur die deelnemers gemaak, en sluit in ‘n hernude klem op die opleiding van kandidate wat die kulturele en linguistiese eienskappe van die gemeeskappe wat hulle dien verteenwoordig; die hersien van beleide in verband met die beskikbaarheid van poste; en die gebruik van groep-gebaseerde terapie waar moontlik.

Gevolgtrekking:

Die bevindinge van die studie verteenwoordig ‘n duidelike kontras tussen die huidige realiteit van VKI dienslewering en ideale dienslewering. Verskeie aanbevelings is deur die deelnemers

gemaak in die lig van hierdie bevindinge, veral in verband met die behoeftes en ongelykheid wat tans voorkom in die veld van VKI in die publieke gesondheidsorgsektor.

Dedication and Acknowledgements

This thesis is dedicated to my parents, Susan and Herman de Bruin. I stand on the shoulders of giants.

I would like thank my supervisor, Dr. Berna Gerber, whose guidance, support, and encouragement has been invaluable throughout this study. I could not have asked for a better leader and mentor.

I would also like to thank my family, for their unwavering support during the completion of this research study. Thank you for cheering me on through every stage of this project, and for making it possible for me to achieve my dream.

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ECI:	Early Communication Intervention
CP:	Cerebral Palsy
SLT:	Speech – Language Therapist

Chapter 1: Introduction

Early communication intervention represents a relatively new field in the profession of Speech-Language Therapy in South Africa as it was introduced to the profession as recently as 1997, by means of the position statement issued by the South African Speech-Language Hearing Association (Kritzinger and Louw, 2003.) This field is nonetheless crucial due to the prevalence illustrated by the study conducted by Van der Linde, Swanepoel, Sommerville, Glascoe, Vinck, et. al. (2016) in the the Tshwane district of Gauteng, which revealed that 13% of infants between 6 – 12 months of age presented with diagnoses of communication delays. This prevalence is furthermore influenced by risk factors, such as poverty, limited prenatal care, lack of stable residence, and residential density, which are often present among children from low socioeconomic backgrounds. (Van der Linde, et. al., 2016.)

These members of the low socioeconomic group are often also members of cultural groups who were historically neglected due to the political history of South Africa. While the implementation of Primary Health Care has made strides in addressing these previous discrepancies, many areas are still underserviced due to challenges such as the imbalances in resource allocation, migration of professionals, and the unequal distribution of professionals in the public and private sectors. (Dookie and Singh, 2012.)

Despite how crucial these services are, speech-language therapists in the South African context are faced with challenges including the insufficient number of qualified professionals to adequately serve the population and a lack of representation of the cultural and linguistic diversity of the population within the field (Pascoe and Norman, 2011.)

The rationale for the proposed research project is thus that early communication intervention services constitute a crucial component of the service delivery of speech and language therapists, but the perspectives of these professionals have not been investigated in relation to the challenges faced within the multicultural environment of the Western Cape public healthcare sector. Furthermore, a list of recommendations to address these challenges appropriately based on the abovementioned perspectives does not currently exist.

Research Question

What are the perspectives and suggestions of the speech-language therapists employed in the public sector of the Western Cape for culturally appropriate and socially just early communication intervention (serving the birth – three year old population)?

Aims and Objectives

- The proposed research intends to examine the perspectives of the speech-language therapists currently employed in the public sector in the Western Cape regarding Early Communication Intervention, as it's main aim.
- Based on these perspectives, a list of recommendations for early communication intervention will be developed that will aim to be appropriate to the multicultural and multi-linguistic population of the Western Cape of South Africa. These recommendations will focus especially on the interventions aimed at children between birth and 36 months of age.

Chapter 2: Literature Review

History and Definition of Early Communication Intervention

Early communication intervention (ECI) represents a relatively new, and crucial field in the profession of Speech-Language Therapy in South Africa. It was introduced to the profession as recently as 1997, by means of the position statement issued by the South African Speech-Language Hearing Association (Kritzinger and Louw, 2003). The term early communication intervention first emerged at the Department of Communication Pathology of the University of Pretoria, following publications and visits by the renowned early interventionist Louis M. Rosetti (The South African Speech-Language-Hearing Association, 2011). Defined by Van der Linde and Kritzinger (2013) as "…an evidence-based approach to the comprehensive management of feeding difficulties, hearing impairment and emerging communication disorders in infants and young children..." This field is clearly differentiated from early childhood intervention and early intervention due to it's emphasis on communication intervention, including related difficulties within the scope of speech-language therapy. While early intervention and early childhood intervention are both terms related to early communication intervention, neither are interchangeable with it as they refer to general services rendered by a variety of therapists, medical professionals, and special needs educators to those preschool children who have special needs (South African Speech-Language-Hearing Association, 2011).

Prevalence of Early Communication Delays

With regards to the international prevalence of early communication delays, various studies conducted in the United Kingdom and Australia have reported that between 11.6% and 16.5% of children present with early communication delays (Van der Linde, Swanepoel, Sommerville, Glascoe, Vinck, and Louw, 2016). Within the South African context, a study conducted by Van der Linde et. al. (2016) in the Tshwane district of Gauteng revealed that 13% of infants between 6 – 12 months of age presented with diagnoses of communication development delays. This is not surprising when one considers that in South Africa many children are exposed to a number of risk factors for developmental delays and disorders (Kritzinger and Van Rooyen, 2014). While estimates of prevalence may vary based on a myriad of factors such as the age of the children included, the criteria used to define a delay, and the assessment materials used, it must be kept in mind that "…communication delays are the most common impairment in early childhood" (Van der Linde et. al., 2016).

Risk Factors

According to the World Health Organisation (2019), a risk factor is any characteristic, trait, or exposure that increases a person's probability to contract a disease or injury. While there is no direct causal relationship between the number and degree of risk factors and the extent of potential communication delay, it would be judicious to examine the various risk factors as they may present in the South African context (Fair and Louw, 1998). By doing so, insight can be gained into the characteristics of the unique South African context that may contribute to the challenge of early communication delay. With regards to these risk factors, the following broad categories will be used: biological risk factors, and environmental risk factors. Both categories of risk factors span the period between gestation and early childhood.

Biological risk factors include various genetic and congenital conditions, gestational age, birth weight, gender, and exposure to illness. With regards to genetic risk factors, several studies consistently support that a family history of language delays or learning disabilities may increase a child's risk of a potential communication delay (Moyle, Stokes, and Klee, 2011). Communication delays also include a gender bias, with males being more likely to present with delayed communication than females (Van der Linde et. al., 2016). Certain congenital conditions, such as cerebral palsy and fetal alcohol syndrome, are known to be more prevalent in South Africa, and are often associated with secondary communication delays (Strasheim, Kritzinger and Louw 2011). The prevalence of low birth weight and preterm birth are as high as 14.7% in South Africa, and may affect a wide variety of neurodevelopmental arenas, such as attention, cognition, language, emergent literacy, as well as feeding and swallowing (Fouché, Kritzinger and Le Roux, 2018). Finally, exposure to disease, such as chronic otitis media and HIV/AIDS, is also considered a risk factor for communication delay. According to Olswang, Rodriguez and Timler (1998), a history of prolonged and untreated otitis media increases a child's risk of communication delay, and toddlers with a history of persistent otitis media present with an increased risk of difficulties with articulation in particular. Exposure to HIV/AIDS is also associated with an increased risk of communication disorders and delays (Strasheim, Kritzinger and Louw, 2011). This presents a particular challenge in South Africa, as 12.6% of the general population is currently living with HIV according to Statistics South Africa (2017). In fact, South Africa is currently home to the biggest epidemic of HIV in the world, and while the antiretroviral treatment program in this country has made strides towards improving the health and life expectancy of

those living with HIV, the impact of this disease is still felt acutely by it's citizens, especially it's children. In 2017 it was estimated that approximately 280,000 children under the age of 14 were living with HIV, and only 58% of these children were receiving treatment. According to the same source, this disease has already orphaned a staggering 2 million children, compounding their risks of acquiring the disease themselves due to the social and financial instability of losing their caregivers (Statistics South Africa, 2017).

Furthermore, according to Rosetti, "…any factor influencing the way a child interacts with his environment can be considered to be a potential risk factor contributing to a developmental delay" (1996, p. 53). Thus, environmental risk factors such as lack of stable residence, number of children in a given home, and maternal age have been shown to further contribute to the prevalence of early communication delays. The latter factors are especially significant, as studies indicate that mothers of more than three children in a given home, as well as mothers under the age of 18 or over the age of 35 are markedly more likely to have children presenting with communication delays (Van der Linde, Swanepoel, Glascoe, Louw, Hugo, and Vinck, 2015). To put these factors in context, 170,526 South African mothers between the ages of 12-14 and a further 3,350,416 South African mothers between the ages of 15-19 gave birth to their first child during the 12 month period preceding the 2011 census. According to the same source, a further 108,764 mothers gave birth to their first children between the ages of 35-49. With regards to number of children borne to each South African mother, the national average is 3.5 children per mother, thus falling within the risk factor category (Statistics South Africa, 2015).

Further environmental factors, such as low parental educational levels, limited healthcare resources, and problematic parental interaction patterns, may amount to a pervasive negative influence on childhood development and communication development in particular (Van der Linde et. al., 2015). Maternal education levels are also linked to the previously discussed factors of maternal age and total number of children borne, with the maternal age being lowest among mothers with limited to no schooling, and the average number of children borne to such mothers being 3.4 children (Statistics South Africa, 2015). With regards to limited healthcare resources, the inadequate prenatal care and overburdened facilities that characterize public healthcare services in many South African communities are known to contribute to the prevalence of communication delays in young children (Van der Linde et. al., 2016). Lastly, Aro, Laakso, Määttä, Tolvanen, and Poikkeus (2014) point out that

"…children's difficulties in engaging in interactions with their parents – and parental responses to these difficulties – may disrupt the process of language learning..." Thus, parental interaction cannot be ignored in relation to communication development, as it often determines a substantial portion of the language input a child may receive (Moyle et. al., 2011). However, in communities affected by the strain of chronic conditions such as HIV/AIDS, poverty, and unemployment, familial interaction patterns may be negatively influenced by such stressors that would naturally take their toll upon the family unit (Balton, 2009). Furthermore, interaction patterns are also affected by the number of children belonging to a given family, and children with more than two siblings are at greater risk for communication delay as the parental interactions are assumed to be shared between the children, with older siblings often speaking on behalf of the younger children (Van der Linde et. al., 2015)

Many of these environmental risk factors are especially prominent among children from low socioeconomic backgrounds. This phenomenon is often referred to as the "double burden" of poverty and disability, due to the fact that living in impoverished environments contributes to poor health and child development outcomes, and these outcomes, in turn, result in more poverty (Van der Linde et. al., 2016). Poverty by itself is also considered a significant risk factor for communication delay, as it has been shown to affect not only the quantity of caregiver-child communication by age 3, but also the quality of said communication (Hirsh-Pasek, Adamson, Bakeman, Owen, Golinkoff, Pace, Yust, and Suma, 2015). This trend is troubling when one considers that, according to The South African Early Childhood Review (2016), an overwhelming 63% of children under the age of 6 live in households that fall below the upper poverty line. With regards to the developmental outcomes of impoverished groups, social factors are distinguished as being the strongest predictors of poor outcomes (Davies, Dunn, Chersich, Urban, Chetty, Olivier, and Viljoen, 2011).

These members of the low socioeconomic group are often also members of cultural groups who were historically neglected due to the political history of South Africa. While the implementation of Primary Health Care has made strides in addressing these discrepancies, many geographical areas are still underserviced due to challenges such as the imbalances in resource allocation, migration of professionals from under-resourced to better equipped urban areas and/or countries, and the unequal distribution of professionals in the public and private sectors (Dookie and Singh, 2012). Furthermore, while the South African Speech-Language-

Hearing Association (SASLHA) has developed guidelines for early communication intervention in the South African context, they recognize the dire need for a better understanding of how best to support our linguistically and culturally diverse population (The South African Speech-Language-Hearing Association Ethics and Standards Committee, 2017).

Consequences of Early Communication Delays

According to SASLHA (2011), "Adequate feeding, hearing and communication abilities are basic to the quality and enjoyment of a young child's health, development, social participation and education." Conversely, when delays emerge in relation to communication abilities, that child's quality of life may potentially suffer in the domains of cognitive, social, behavioural, and academic development (Larney, 2002). Bearing in mind that, according to Broomfield and Dodd (2004) communication delays are the most common delay in early childhood, these far-reaching potential consequences later in life present additional challenges to be addressed.

Firstly, consider the more immediate, or short-term effects of a delay in communication abilities upon a child's development and quality of life. For the purposes of this review, "short-term" refers to those effects present before a child begins to attend kindergarten (approximately age 5). A widely held belief that often rears its head in discussions of early communication delays, specifically in the case of so-called "late talkers," is that they will catch up on their own, thereby negating the need for any professional intervention. A "late talker" as defined by Roos and Weismer (2008) is a 2-year-old child who uses a limited expressive vocabulary in the absence of known developmental delays, and who does not make use of two-word combinations. With regards to the perception that these children will catch up naturally, research conducted by Dale, Price, Bishop, and Plomin (2003) confirms that approximately half of "late talkers" catch up to their typically developing peers with regards to expressive vocabulary by the age of 4. However, caution has been expressed recently by Bleses, Makransky, Dale, Højen, and Aktürk Ari (2016) that while these children who "caught up" may achieve average vocabulary and grammar results by the time they leave preschool, many of them present with persistently below-average overall language abilities, and are thus considered to present a continuing risk for poor communication development.

Another documented short-term effect of delays in early communication development is the differences in emotional regulation that arise between children presenting with typical communication development and those presenting with early delays (Aro et. al., 2014). Emotional regulation, also called affect regulation, refers to a person's ability to adapt their emotional state depending on what is called for by the environment (Cole, Martin, and Dennis, 2004). Not only is the appearance of emotional expression and expressive communication related, but a relationship has also been demonstrated between delays in early communication expression and the expression of more negative emotions, such as fear and anger (Aro et. al., 2014). These findings may be considered in conjunction with the fact that, according to Yoder and Warren (1998), a child's ability to communicate enhances their ability to affect their surroundings and also improves their chances of having their needs met. Thus, we may surmise that stronger communication skills may mitigate some of a child's daily challenges or frustrations.

Secondly, consider the more long-term effects of early communication delays that may manifest in the domains of cognitive, academic, social and behavioural development spanning the period from kindergarten into adulthood. While it stands to reason that the presence of difficulties in any of these domains may influence and compound the effects of the others, the domains of cognitive and academic development are especially interrelated, and will therefore be discussed together.

According to Hirsh-Pasek et. al. (2015), "Language ability in early childhood is the single best predictor of school readiness and later school success." A fundamental skill in the pursuit of academic success is, of course, literacy. However, research has demonstrated that a history of early communication difficulties may result in challenges with phonological awareness skills, which, in turn, may result in spelling and decoding difficulties (Pascoe, Maphalala, Ebrahim, Hime, Mdladla, Mohamed, and Skinner, 2010). These findings are strongly confirmed by studies that were conducted in the United Kingdom and Canada and which followed their participants for at least ten years and demonstrated the relationship between early communication delays present in the preschool years and later difficulties with literacy (Larney, 2002). Thus, despite individual intellectual potential, these children are already susceptible to academic failure, as the ability to read and write well underlies scholastic success. Evidence obtained from neurological imaging further supports these findings, demonstrating differences between the neural circuits responsible for print and

speech processing in school-age children with a history of early communication delays and those without (SASLHA, 2011). Not only do these residual effects of early communication delays rear their heads into the adolescent years, but the resulting poorer academic achievement, as well as the increased risk for poorer mental health and psycho-social difficulties, may also negatively impact that individual's employment opportunities (Tosh, Arnott, and Scarinci, 2016).

Within the domain of behavioural development, Kaiser and Roberts (2012) assert that a delay in early communication abilities also places a child at risk for developing behavioural problems. In fact, according to Horowitz, Irwin, Briggs-Gowan, Bosson Heenan, Mendoza and Carter (2003), the parents of children with these delays are four times more likely to report behavioural problems than parents of typically developing children. These behavioural problems often stem from challenges with self-regulatory skills, which, in turn, are related to communication delays. This is due to the fact that communicative development and language skills are assumed to pave the way for the development of self-regulation, as these components seem to provide the psychological tools for developing self-regulatory skills. Self-regulation is defined as the product of three interconnected skills: regulation of behaviour, regulation of emotions, and regulation of cognitive processes (such as regulation of attention) (Aro et. al., 2014). As discussed previously, difficulties with emotional regulation are already evident in the short-term effects of early communication delays. Poor early communication development also negatively affects executive functioning skills (Aro et. al., 2014). These skills, in combination with self-regulatory skills, are responsible for a child's ability to switch between tasks, remember instructions, focus attention, and control impulses. Therefore, when these skills are lacking, a child may present with a range of behavioural challenges such as difficulties dealing with distractions, impulsivity, or temper outbursts (Hoffman, Schmeichel and Baddeley, 2012). Furthermore, children with a history of communication delays who develop behavioural problems are at a substantially increased risk of literacy and academic difficulties (Kaiser and Roberts, 2012).

With regards to the domain of social development, Kaiser and Roberts (2012) remind us that "…communication is a social process that most often occurs in dyads." Early communication development is closely associated with early social development, as is evident in the relationship between understanding the social cues of pointing or following a person's gaze with that of joint attention, for example (Landa, 2007). The effects of early communication

delays in this domain are often associated with social withdrawal and what is referred to as "internalizing symptoms." These internalizing symptoms include anxiety, withdrawal, and depression, which exert a negative influence on a person's ability to interact with others (Aro et. al., 2014). Social withdrawal may naturally occur as children with poorer communication abilities often avoid initiating or participating in conversations with peers (Olswang et. al., 1998). Furthermore, children presenting with difficulties communicating are more likely to experience more negative and less positive social interactions with their peers (Kaiser and Roberts, 2012). It should come as no surprise, then, that these children are also at an increased risk of being ignored or even bullied by their peers during their school years (Pascoe et. al., 2010).

Finally, the potential cumulative effects of early communication delays as discussed affect a variety of developmental domains and may exert an influence across an individual's lifespan. According to Norbury (2015), by age 19 the majority of people presenting with a history of communication impairments are not involved in employment, formal training, or education. These outcomes are troubling, as the challenges that prevented these individuals from these pursuits may not resolve on their own. Logically, avoiding such outcomes could positively impact typically resource-restricted health and social services in the long run (Norbury, 2015). Therefore, we may concur with Tosh et. al. (2016) that "Effective intervention for children with speech and language difficulties is an important investment at both the individual and societal levels."

Early Communication Intervention in South Africa

According to SASLHA (2011), optimal early communication intervention services are governed by the following four key principles: firstly, ECI services are centered around the family, as well as being linguistically and culturally appropriate; next, ECI services are supportive of the child's natural development and encourage the child's participation in his/her natural environment; thirdly, these services are team-based, and must always be coordinated among team members to yield comprehensive services; and finally, ECI services must always be based upon the best quality of evidence available. These principles are expanded to address the unique context of South Africa as follows: due to the high prevalence of child abuse and neglect, as well as the fact that the mother-child bond forms the basis of early communication development, the attachment between mothers and newborn infants must be promoted and supported; and secondly, an asset-based approach that focuses

on the strengths of the individual child, his/her family, and their surrounding community is expounded, thereby emphasizing the assets that may be utilized to support and sustain the ECI services (SASLHA, 2011).

In order to unpack these principles, one must firstly examine what is meant by services being "family centered." Intervention services are centered on each particular family insomuch as they include the needs of the family members (not only the parents), and are planned and executed collaboratively with the family. These family members not only spend the most time with the child, and therefore have the most opportunity to affect positive changes, but they also form part of the child's natural environment, ideally situating them to support successful intervention. Thus, services that are family-centered ensures that the child is able to participate in the natural environment of the family home where the child spends the most of his/her time, as expounded in the second key principle. Collaboration with the family also improves the likelihood that recommendations will be adopted into their daily lives, resulting in more sustainable intervention efforts (Abdoola, 2015). In fact, Kaiser and Roberts (2012) go so far as to say that "Teaching and supporting partners (parents, caregivers, teachers, and peers) are essential to successful child communication intervention." Thus, members of the child's family are essential members of the intervention team, who, when trained, informed, and supported, can model new skills, modify their own responses, teach new communicative forms and functions, and respond to the child's attempts at communication, all within the natural context of the family (Kaiser and Roberts, 2012).

Furthermore, as members of the team, they also have valuable insights into the individual child's daily life, strengths, and challenges. These insights, as well as the linguistic context, cultural beliefs, and spiritual views of the family, should be considered in intervention services. In terms of linguistic context, we must be aware that monolingualism is rare in South Africa. The vast majority of children are bilingual or multilingual, and often several different languages are spoken within one family (Pascoe et. al., 2010). The various challenges related to linguistic diversity will be further explored in the "Challenges" section below. With regards to cultural beliefs, many cultures traditionally impart knowledge from the old to the young, which may influence how information and training is received from a speech-language therapist who is younger than the caregiver (Kritzinger and Louw, 2003). Taking a child who appears to be healthy, such as a child with a communication delay or disorder, to the hospital or clinic is also often viewed as culturally and socially inappropriate

due to the perception that healthcare facilities are only meant for the sick (Friderichs, Swanepoel, and Hall, 2012). The family's particular religious views may also exert an influence on how the family perceives developmental disorders or delays, as well as how urgent their concern regarding these topics may be (Olswang et. al., 1998). Inclusion of traditional healers in the intervention team may also depend on the particular family's religious views and convictions, and should therefore be taken into consideration (Medhurst, Abdoola, and Duncan, 2016). However, cultural and religious practices also afford an opportunity to imbed intervention goals and activities into the family's everyday live, such as the singing of songs or telling of stories (Hirsh-Pasek et. al., 2015).

With regards to the second key principle, namely that ECI services are supportive of the child's natural development and encourage the child's participation in his/her natural environment, Olswang et. al. (1998) asserts that "Intervention is designed to facilitate or accelerate the change that is likely to occur on its own." Thus, intervention services should commence at the developmental level of the child, and progress in a way that is complementary to the natural developmental progression that would be expected of a typically developing child. The intervention goals should therefore focus on what is most developmentally appropriate for the child at a specific stage, and should change as the child progresses from one developmental stage to the next (Warren and Yoder, 1997). The child's environment also has a crucial role to play, both as a setting for participation and as a tool for intervention. In terms of participation, the natural environments of a child include not only the immediate family and home setting, but also the broader community setting outside the home (American Speech and Hearing Association, 2008). The environment may also be used as an intervention tool, serving to scaffold a child's learning with regards to basic vocabulary, semantic relationships, and pragmatics (Warren and Yoder, 1997). For example, one may arrange the environment so that desired items, such as toys, are out of the child's reach. In this way, the child can be encouraged to request the item by naming it, thereby supporting the use of a basic vocabulary item (Warren, Bredin-Oja, Fairchild, Finestack, Fey, and Brady, 2006).

According to the third key principle, a team-based approach emphasizing collaboration among team members is crucial for comprehensive intervention services. In fact, SASLHA (2011) states, "The golden standard for the challenging task of infant-toddler assessment within a family-centered framework, is a transdisciplinary play-based arena assessment..."

The transdisciplinary model is defined as an unifying service delivery model comprised of the following components: role release, role expansion, and arena assessment (Moodley, Louw, and Hugo, 2000). In essence, this model calls for professionals from different disciplines to combine and exchange information, skills, and knowledge in service of the best outcomes for the client. In order to work effectively and collaboratively toward a common goal, all team members must share a common outlook regarding the intended outcome of their services (Moodley et. al., 2000). The team members required may differ from one case to the next, but the following professionals are typically involved: parents and other family members, speech-language therapist, audiologist, paediatric neurologist, and occupational therapist. Of particular note are the audiologists, who play an especially central role in terms of understanding the importance of responsive communication interactions, infant- or child-directed speech, and the infant auditory system (SASLHA, 2011). These colleagues provide various services, including hearing screening and assessment, that may detect the presence of even a mild hearing loss that could negatively influence language development and intervention efforts (Fair and Louw, 1998).

The final key principle refers to the importance of evidence-based practice when delivering early communication intervention services. Evidence-based practice is defined as an approach that combines the expertise of the service provider with the preferences of the clients, as well as current, high-quality scientific evidence, in the process of making clinical decisions (American Speech-Language-Hearing Association, 2005). According to the evidence currently available, the following additional components should be considered when providing early communication intervention services: early identification, and prevention services.

Early identification often forms the first step of early intervention efforts, and can greatly diminish the potential effects of a present delay (Van der Linde et. al., 2016). This may be due to the underlying critical period for the development of basic listening and communication skills. This critical period between birth and six years represents a period wherein neural plasticity is at its pinnacle, and early intervention taking place during this period may positively impact the brain's development (SASLHA, 2011). Early identification, in conjunction with the level of parental involvement, can also be strong predictors of the effectiveness of intervention services (Kritzinger, Louw, and Rosetti, 2001). Family members play a crucial role in the domain of early identification, as they are well situated to notice

delays at an early age, and often act as the referral agent to bring the child to the attention of healthcare professionals (King, Rosenberg, Fuddy, McFarlane, Sia, and Duggan, 2005).

Prevention services, such as communication screening, risk assessment, parental training, and general developmental monitoring, are essential in supporting families from underserved communities that include members with communication delays (Claassen, Pieterse, Van der Linde, Kruger, and Vinck, 2016). Preventative strategies such as developmental screening and monitoring can be employed from birth in order to identify and address risks, and diminish the effect of potential delays, including communication delays (Van der Linde et. al., 2015). In fact, if risk factors are identified early, some communication delays can be prevented altogether (Claassen et. al., 2016). In this study, the term "health promotion" was used to describe strategies and interventions designed to protect and improve an individual's health and prevent ill health (WHO, 2016). Health promotion would therefore include awareness of developmental norms and available intervention and support services. These are crucial preventative strategies, because when caregivers and families are not armed with this information, they may be unable to identify the early signs of delays and may not know whom to turn to in order to address these concerns (Medhurst et. al., 2016). It stands to reason, then, that the current international shift towards more prevention-oriented services could be especially applicable to the often under-served and under-resourced at-risk populations of South Africa, and should form the cornerstone of our intervention services (Van der Linde et. al., 2015).

In view of these key principles, one may review two examples of early communication intervention programmes that have been implemented and/or expanded within South Africa. A parent-child language programme has been developed by the Speech Therapy Department of Chris Hani Baragwanath Academic Hospital in Soweto, Gauteng, with the aim of training and educating families regarding their child's communication difficulties. While the training and information sessions, which took place once a week for a period of 16 weeks, did occur at the medical institution, the programme emphasized a family-centered approach to intervention services (as opposed to the traditional medical model). These sessions were comprised of information exchanges between families and speech-language therapists, exploring the child's communication challenges and the family's priorities and needs. Techniques were also demonstrated and practiced, with the purpose of being used in natural, everyday activities to support optimal communication, carryover of skills, and sustainable

intervention. Upon completion of the programme, the family participated in regular follow-up sessions and the child's progress was monitored (Samuels, Slemming and Balton, 2012).

The second early communication intervention programme, HI-HOPES, is especially notable for two reasons: firstly, the fact that it is available within both the public and private healthcare sectors is unique to South Africa; and secondly, it was the first programme of its kind to focus on the families of hard of hearing and deaf infants from birth to the age of 3 (Samuels et. al., 2012). This programme, which was developed on the basis of the SKI-HI programme in the United Kingdom, comprises home-based sessions that take place every second week at no cost to the families involved. During these sessions, a team of speech-language therapists, social workers, audiologists, and early childhood educators collaborate with the family and empower them to make informed decisions regarding communication modalities and amplification options. Information is also provided regarding literacy, communication, child development, and amplification, all within the context of everyday routines and activities, such as interactions with siblings and caring for amplification devices (Samuels et. al., 2012). HI-HOPES is based at the Centre for Deaf Studies at the University of the Witwatersrand, Gauteng, and has subsequently been implemented in four other provinces, namely the Western Cape, Kwazulu-Natal, Mpumalanga, and Limpopo (HI-HOPES, n.d.). Both programs described above have reportedly delivered effective improvements to early childhood language development, but perhaps their greatest contribution lies in their example of collaborative and family-centered early intervention programmes within the South African context (Samuels et. al., 2012).

Challenges of ECI Service Delivery

While each key principle and role described in the preceding section would ideally be fulfilled at every opportunity for ECI, speech-language therapists in South African are faced with a multitude of unique challenges. Foremost among these is the insufficient number of qualified professionals to adequately serve the population. As of 1 October 2018, a total of 2,696 speech-language and hearing therapists (including dual-qualified speech-language therapists and audiologists) are registered to practice and serve the entirety of the South African population (Health Professionals Council of South Africa, 2018). Taking into consideration a total population of approximately 51, 730, 000 per the 2018 mid-year population estimates, this equates to one speech-language and hearing therapist for a group of roughly 19, 188 South Africans (Statistics South Africa, n.d.). However, the reality may be even more

troubling, as Pascoe and Norman (2011) point out that these therapists are not only insufficient in number to adequately serve the population, but they are also unequally distributed between the private and public sectors. This inequality often results in even more daunting caseloads for those therapists serving the public sector (Strasheim, Kritzinger, and Louw, 2011). Further exacerbating this issue is the fact that early communication intervention services, and the speech-language therapists that provide these services, are often available in urban areas, but small communities, semi-urban areas, and rural towns often do not have permanently appointed therapists to initiate, provide, and sustain early communication intervention efforts (SASLHA, 2011).

Moreover, the current body of speech-language therapists that are currently practicing in the country do not represent the cultural and linguistic diversity of the population that they serve, furthermore limiting access to these services. The linguistic diversity of 11 official languages, and many more unofficial languages and dialects, combined with the previously illustrated scarcity of therapists, inevitably leads to many speakers of indigenous languages being under-served (Pascoe and Norman, 2011). This is particularly troubling, as language is an expression of culture, and cultural expression in turn is a fundamental human right (Pascoe, Klop, Mdlalo, and Ndhambi, 2017). Early communication intervention guidelines clearly suggest that a client should not be denied services in their mother tongue or language of choice due to a linguistic mismatch between the client and the therapist (SASLHA, 2011). Despite these clear guidelines, the majority of therapists are trained in English and Afrikaans only (Van der Merwe, Cilliers, Maré, Van der Linde, and Le Roux, 2017). Within the Western Cape in particular, the majority of speech-language therapists offer services only in one or two of the three languages mostly spoken in the province, namely Afrikaans and English, which may be the second or third language of many children and caregivers, especially those with isiXhosa as mother tongue.

In order to address situations where the therapist and client do not share a common first language, SASLHA (2011) suggests that a family member, such as the mother of the child, may be asked to act as an interpreter. However, while this presents an avenue of communication where there may previously have been none, the use of an interpreter, especially an untrained interpreter, presents its own set of challenges. Firstly, an interpreter may unintentionally mistranslate instructions or responses, and the therapist usually has no way of knowing when the mistranslation occurred and no way to control for such errors.

Secondly, a lack of expertise regarding subtle dialectal differences and their impact may result in an under-identification or over-identification of language impairments. Finally, while multilingualism is common in South Africa, a family member who has a language in common with the therapist may not always be present or available for the session (Southwood and Van Dulm, 2015). The use of trained interpreters may diminish the effects of the challenges described, but may not altogether preclude them. Furthermore, trained and qualified interpreters are often difficult to come by, as a recent study pointed out that only 11% of the ECI service providers working in the public hospitals in four of the provinces of South Africa had had the opportunity to make use of formal interpreters in sessions conducted with high-risk infants and family members receiving early intervention (Strasheim, Kritzinger and Louw, 2011).

Not only is the limitation of cultural and linguistic diversity evident in the current population of therapists, but also in the intervention materials and instruments available to be used. Assessment is acknowledged as the cornerstone of intervention, but a substantial shortage of culturally and linguistically appropriate assessment instruments and materials befitting the South African context is evident (Chambers, Stronach, and Wetherby, 2016). The current practice of early communication intervention in South Africa is mostly based on assessment and intervention tools and methods that were developed in countries such as the United Kingdom, Australia, or the United States of America, with some adaptions made in the hope of making these resources more appropriate for the local population (Pascoe and Norman, 2011). The development of appropriate assessment and intervention materials and practices for our context is crucial, and steps are being taken to address this aspect by various projects, such as the development of adaptions to the MacArthur-Bates Communicative Development Inventory for the South African context, currently being undertaken by research teams from various local universities (H Oosthuizen, personal communication, 15 February 2019). In all these efforts Pascoe and Norman's (2011, p. 3) caution should be firmly kept in mind, namely that "…simply translating the language of a test does not make it appropriate for another population group, as the culture and context of the target population needs to be considered to avoid misinterpretation of results."

Another challenge of particular relevance to South Africa is the widespread poverty among its citizens. Not only does poverty increase a child's risk of communication delay as discussed previously, but it also limits his/her access to intervention services, sometimes preventing

such access entirely (Samuels et. al., 2012). Poverty may also negatively impact a child's assessment results, even if that child does not present with a delay, due to the fact that children from lower socioeconomic backgrounds may be unfamiliar with the specific toys or other materials used in the assessment process (Chambers et. al., 2016). Poor children, who are often the most in need of intervention, may rarely or never receive these services. This is in large part due to the lack of speech-language therapists in lower socioeconomic status areas, such as rural communities (Pascoe and Norman, 2011), as well as the fact that the public healthcare system is responsible for serving up to 80% of the population. Unfortunately, this public healthcare system also reflects the disparities among its citizens' economic groups (Samuels et. al., 2012).

Closely linked to issues of poverty are the geographical factors that may prevent a child from receiving the help he/she may need. For example, a study by Fair and Louw (1998) found that speech-language therapy sessions conducted at the Centre for Early Intervention in Communication Pathology at the University of Pretoria could only be conducted once a month, due to the significant distance that families had to travel to reach healthcare institutions, like community clinics or hospitals. These travels often imply expenses, such as paying taxi fare or a fee to a member of the community who has access to a car. Family members may also be required to take time off from work in order to accompany the child when making the journey, which may also result in additional financial implications (Madiba and Kekana, 2013). Finally, these challenges may result in poor or sporadic attendance of therapy sessions, which negatively impacts the outcome and effectiveness of the intervention services (Samuels, Slemming, and Balton, 2012). It is evident that the challenges faced by these families are inter-related, and may work together in a "domino effect" of sorts to worsen the impact of each individual issue.

The imbalances that are evident in South African healthcare services represent another challenge, as they extend beyond the disproportionate distribution of personnel between the public and private sectors discussed previously. These imbalances also include resource constraints, poor staff motivation, low levels of clinical skills, lack of managerial leadership, and the loss of retention of professionals. Poor referral structures, which may overlook the need for intervention in the early childhood years, also leads to the underutilization of some professional services (Dookie and Singh, 2012). With regards to early communication intervention in particular, a troubling lack of formal health policy and evidence based

guidelines is reported within the context of primary healthcare. The lack of formal policy in these settings may stem from a lack of awareness of the role and importance of these services among the policy makers, coupled with a lack of consensus regarding how to implement effective programs into the existing healthcare infrastructure (Van der Linde and Kritzinger, 2013). Without such formal policy, it may be unlikely that the abovementioned imbalances will be sufficiently addressed.

Finally, despite the progress marked by the past 24 years of democracy, the legacy of South Africa's political past still has a lasting impact on its economic, educational, healthcare, and social landscapes. While strides continue to be made in service of transformation, many of the pressing challenges described above, such as poverty, imbalances in healthcare services, and the geographical challenges faced by rural communities, find their roots in the oppression of people of colour that characterized the Apartheid years (Pascoe and Norman, 2011). The profession of speech-language therapy in our country was also shaped, to a degree, by its political heritage. Fewer people of colour entered our profession due to the exclusionary educational policies of the time, which may have, in turn, lead to the lack of cultural and linguistic diversity and representation present in our field today. Furthermore, fewer researchers representing people of colour have subsequently emerged (Southwood and Van Dulm, 2015). These researchers, equipped with cultural and local knowledge, may have been uniquely positioned to contribute contextually relevant and culturally appropriate resources (Pascoe and Norman, 2011). Unfortunately, it may be argued that very little has changed with regards to the training programs and curriculums that are tasked with equipping the new generation of speech-language therapists. This is particularly evident with regards to the absence of indigenous knowledge and African languages in these training programs, as well as the lack of unified standards for working in multilingual and multicultural settings (Khoza-Shangase and Mophosho, 2018).

Bridging the gap

While it is clear that early communication interventionists in South Africa face a multitude of daunting challenges, we must not lose sight of several hopeful factors that could potentially assist us in narrowing the divide between what is currently being done and what ideal ECI services would entail. The South African government, for example, has instituted the community service program for health professions graduates in an attempt to improve access to health services by placing newly qualified professionals in areas where they might not have

considered working previously and/or where posts were lacking. In this manner, speech-language therapists are employed in areas that are in some cases very rural, and where access to these services has historically been (and continue to be) very limited. These efforts, while admirable, do not adequately address the need for early communication intervention services at this level on their own, as the districts served by a given community service speech-language therapist may be large and home to a greater population than could be realistically served by a single professional.

Secondly, we are not alone in our efforts to improve service delivery to the early childhood population. By means of collaborating with other professionals, such as audiologists, occupational therapists, and community nurses, we can work together to complement each other's efforts as mandated by the transdisciplinary model, and perhaps even lighten each other's workload. The existing preschool educational and child care programmes could also be enriched by adding early communication development goals and training our colleagues working in this field regarding developmental milestones and red flags. Furthermore, existing healthcare programmes, such as the Kangaroo Mother Care initiative in maternity wards, are ideally suited to train and inform new mothers regarding communication development, hearing protection, feeding safety, and stimulation strategies (SASLHA, 2011).

Another hopeful factor is the emphasis on training current speech-language therapy and audiology students in early communication intervention. Currently, all undergraduate programmes in these fields include modules dealing with ECI, which may result in an improved capacity to render these services in all environments where these professionals practice (SASLHA, 2011). According to Barratt, Khoza-Shangase, and Msimang (2012), research on the subject of developing culturally and linguistically appropriate assessment instruments and intervention materials is also on the rise. Adaptions to existing materials are also underway, and several ventures, such as the adaption of the Communication and Symbolic Behavior Scales – Developmental Profile (CSBS DP) for use with English-speaking children in South Africa, show promise (Chambers, Stronach, and Wetherby, 2016). Adaption and translation of the Mullen Scales of Early Learning are also currently taking place, in hopes of making this instrument contextually relevant (Bornman, Romski, Tonsing, Sevcik, White, Barton-Hulsey, and Morwane, 2018). As mentioned previously, adaptions to the MacArthur-Bates Communicative Development Inventory are also being undertaken by

several local research teams in order for it to be applicable to the South African population (H Oosthuizen, personal communication, 15 February 2019).

Finally, the current study also attempts to assist in closing the gaps illustrated in the previous section by contributing a list of recommendations for appropriate and ethically just ECI services. These recommendations will be based on the voices and perspectives of Western Cape speech-language therapists working at ground level to deliver ECI services in the public sector. These recommendations for accessible and equitable ECI will also entail an examination of what is currently in existence at the various levels of health care, including the therapists' perceptions of relevant role players in ECI, support and stimulation programs, as well as protocols for monitoring and follow-up services. In conclusion, attempts to close the gaps within the public healthcare sector to achieve accessible and equitable ECI services in the South African context would most likely need to be the result of a combination of the facilitating factors discussed above.

Chapter 3: Methodology

Research Design

This study has been undertaken using a qualitative method of inquiry, with an underlying theoretical foundation informed by the relevant literature in the field of early communication intervention to guide the research process. According to Bogdan and Biklen (2007, p. 22), qualitative research is defined as "…an approach to social science research that emphasizes collecting descriptive data in natural settings, uses inductive thinking, and emphasizes understanding the subjects' point of view." Thus, the qualitative approach was selected due to the fact that the purpose of this study was to gain insight regarding the perspectives of the participants, and this method allowed an inductive and flexible approach to answering the research question (Merriam & Tisdell, 2016). The inductive nature of this approach was particularly appropriate, as the focus of this research was to deliver a better understanding of the research problem in the absence of an existing theory that adequately explains or describes the phenomenon in question, rather than to prove or disprove a pre-determined hypothesis (Bogdan & Biklen, 2007).

Within this research design, the researcher is considered to be the primary research instrument (Merriam & Tisdell, 2016). A further crucial aspect of this enquiry is that of phenomenological reduction, which refers to the process of bracketing, or aiming to set aside the researcher's own ideas and beliefs about the phenomenon. This process is related to "epoche," or the deliberate cessation of one's judgment (Lichtman, 2013). The research design was descriptive in nature, as the data collected took the form of transcribed semi-structured interviews, and the result of qualitative research should ideally be a rich description of the phenomenon being studied, including the context, participants, and other noteworthy aspects (Merriam & Tisdell, 2016). Furthermore, the research design was also exploratory in nature, in the sense that previous examinations of the research problem were limited or absent (Bogdan & Biklen, 2007).

Participants

In order to ensure the ethical conduct of this study, an application was submitted to the Health Research Ethics Committee (HREC) of Stellenbosch University for the purpose of gaining ethical clearance to conduct the study. After this clearance was obtained (HREC reference: S19/02/044), further applications were submitted to both the Western Cape Provincial

Department of Health, and the City of Cape Town. Subsequent clearance was obtained from these organizations for the following healthcare institutions and districts: Tygerberg Hospital, Groote Schuur Hospital, Valkenberg Hospital, Witzenberg Sub-district, Northern Tygerberg Sub-structure, Karl Bremer Hospital, Mitchells Plain Hospital, Stellenbosch Hospital, Overberg Sub-district, Nolungile Community District Clinic, and Wesfleur Hospital. Informed consent was obtained in writing from all participants in the study as a precursor to the interview process, and no participant was interviewed in the absence of a signed consent document. The informed consent document consisted of an explanation of the purpose of the research, the risks and obligations of the participants, the complaint procedure and contact details of the researcher and the HREC, and any potential benefits that may result from the study (please see Appendix D for a copy of the consent document). Each of these aspects was also discussed verbally with each participant to confirm that they were fully aware of this information. Furthermore, all participants were made aware that they were free to withdraw from the study at any stage without incurring negative consequences.

In order to ensure that the rights of the participants were not infringed upon, confidentiality was maintained throughout all phases of the research. No identifying information was included in the transcripts of the interviews or in this thesis, or will be included in any future research reports, or presentations based on the research. Each participant was assigned a code in place of their name in all research documents so as to protect their identity. Only the researcher and her supervisor know the identities of the participants. Furthermore, the relevant electronic files and transcripts were saved on a password-protected laptop computer, which is privately owned and can only be accessed by the researcher.

Participant Selection Criteria

The sampling procedure that was employed in this study was that of the purposeful method of sampling. This method of sampling was selected due to the fact that it is considered most appropriate when "…the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned" (Merriam & Tisdell, 2016, p. 96). These participants from whom the most can be learned about the phenomenon in question are then considered to be "information-rich cases" (Patton, 2015, p. 53). Participants in this study were therefore selected based on a variety of inclusion and exclusion criteria, in order to determine their suitability to shed light upon the specific research question. The following table illustrates the criteria that were considered in the selection of participants:

Table 2: Participant Selection Criteria

Participant Selection Criteria
Qualified speech-language therapist, post community service (graduated before 2018)
Employed in the public sector
Employed in the Western Cape province of South Africa
Current case load includes services to 0 – 3 year-old children, or recent experience managing such cases (within 12 months of taking part in the study)

Selection Procedure

The selection procedure for the participants in this study took place as follows: a database of the speech and language therapists employed in the public sector in the Western Cape was obtained, and each of the potential participants was contacted via telephone and/or email. In keeping with Section 19 of POIA, this personal information was stored on a secure access laptop computer within a password-protected folder. The researcher was the only person able to access both the laptop computer and the folder. Once this study is completed, all personal information will be permanently removed from the laptop computer as is required by POPIA (South African Government, 2021). Only those therapists who were employed at the institutions where clearance for the study was granted were contacted as potential participants. The eleven healthcare institutions that granted clearance for the study represented a total number of 15 speech and language therapists who were employed at these institutions as potential participants. Each of these therapists was contacted telephonically and/or via email. The purpose of the proposed study was then explained to each potential participant, and his or her informed consent or refusal to participate was attained. Of the 15 potential participants, a total of 7 participants consented to participate in the study. The following questions pertaining to the inclusion criteria were then asked, in order to determine whether these individual qualified for inclusion in the study:

- Are you employed in the Western Cape?
- Did you graduate before 2018?
- Are you employed in the public sector/by the Department of Health?

- Do you currently provide services to children between 0 – 3 years of age, or have you done so in the last 12 months?

Once consent had been obtained and the individual had satisfied all of the inclusion criteria, the date, time and location of the data collection interview were set.

Demographic Characteristics

The participants that took part in the study were exclusively female speech- language therapists, ranging between the ages of 25 and 45 years. These therapists had a wide variety of experience with regards to providing ECI services, ranging from 1,5 to 20 years of experience in working with this population. The therapists also represented a diverse selection of healthcare institutions where they are currently employed, from tertiary hospitals to rural district institutions such as community health clinics. The majority of the participants had spent some time working in the private sector, however brief, but had all returned to the public healthcare sector at some point after the completion of their community service year. The demographic characteristics of the participants are indicated in Table 2.

Table 3: Demographic Characteristics of Participants

	Age:	Gender:	Highest Qualification:	Total Years of Experience:	Years of ECI Experience:	Place of Employment:
Participant A	26-30	F	Bachelor's Degree	2.5	2.5	District Hospital
Participant B	41-45	F	Bachelor's Degree	20	18	District Hospital
Participant C	26-30	F	Master's Degree	7.5	7.5	Rural Sub-district Clinics
Participant D	26-30	F	Bachelor's Degree	1.5	1.5	Tertiary Hospital
Participant E	26-30	F	Bachelor's Degree	4	4	Tertiary Hospital
Participant F	21-	F	Bachelor's	3	3	Urban Sub-

	25		Degree			district Clinics
Participant G	31-35	F	Bachelor's Degree	9	9	Tertiary Hospital

Participant Compensation

The participants are to be compensated for their time by means of an invitation to a CPD-accredited presentation regarding the findings of the study. In this way, they will be able to benefit from the research that they contributed to by gaining new information that could be applied in their professional context. The participants that will not be able to attend this presentation in person will be able to access it remotely by means of a podcast/video conferencing service.

Materials and Instrumentation

Interview Guide

An interview guide composed of 10 open-ended questions was used to guide the semi-structured interviews (please see Appendix E for a copy of the Interview Guide.) The semi-structured approach to the interviews was selected due to the fact that specific information was desired from the participants, but the researcher wished to adapt to the natural flow of the conversation and the emerging views of each participant so as to explore the topic in a natural manner. This approach allowed the researcher to adapt the wording and order of the questions in response to the dialogue with the participant (Merriam and Tisdell, 2016).

The interview guide was subdivided into three sections of questions, namely: introductory, "ice-breaker" type questions; closing, revisionary questions; or intermediate questions building on previously introduced thoughts. Each question was designed to prompt examination of the various sub-topics relevant to the research question, such as the current early communication intervention practices being used, the population that benefited from these services, suggested improvements and adaptions to current practices which would result in improved interventions and service-delivery models, suggestions for intervention practices that have not been implemented in the public sector as of yet, and specific challenges in this

area that must be accounted and compensated for. The interview guide was by the researcher herself based on the research question to be investigated, and is original in the sense that other guides or question lists were not adapted or used as the basis of this interview guide. In the case of the introductory questions, as well as the more extensive questions that required a great deal of information from the participants, probes were also included in the interview guide. These probes were designed to prompt the participant to provide more detailed or specific information about a certain aspect, or to clarify an ambiguous response.

The interview guide was developed in English and then translated into Afrikaans by the researcher, who is an Afrikaans native speaker. The interview guide was provided to each of the participants several days prior to the interview via email, in order to facilitate their reflection upon the questions in relation to their personal experience. Each interview was conducted in the participant's language of choice. Out of the total of 7 interviews, 5 were conducted in English and 2 were conducted in Afrikaans.

Procedures

Pilot Study

A pilot study was conducted with one participant in order to test and refine the content and format of the questionnaire and the interview process. This individual satisfied the inclusion criteria of the study. The pilot study took place at her place of work at a public health institution in the Western Cape, and consisted of an English interview per her preference, which took 28 minutes to complete. The interview was recorded using an audio recording device, of which the participant was aware and consented to, and then later transcribed (verbatim) by the researcher onto a word processing document for analysis purposes. The researcher and her supervisor then reviewed the transcription, and as per their discussion the wording of one of the questions was altered to lend more clarity to the type of information expected from the participant. This alteration was then also made on the corresponding Afrikaans interview guide. No other aspects of the content or format of the interview guide or the interview process were altered prior to the commencement of the main study data collection. This interview was therefore included in the data of the study.

Data Collection

This study took place in the Western Cape province of South Africa, and aimed to include information gathered from each health sub-district of the province, namely: Cape Town Metropolitan Municipality, West Coast District Municipality, Cape Winelands District Municipality, Overberg District Municipality, Eden District Municipality, and Central Karoo District Municipality. However, due to the limited number of research sites that permitted participation in the study described above, as well as the withdrawal or declination of some participants, only three of these health sub-districts are represented in the data collected throughout this study.

Data was collected by means of face-to-face semi-structured interviews with qualified speech and language therapists currently employed in the public sector that met the criteria for participation in the study. The interviews were conducted in English or Afrikaans, depending on the preference of the participant, as the researcher is fluent in both languages. These face-to-face interviews took place at the workplaces of the participants in the areas within a 50 km radius from Tygerberg Hospital in order to minimize transportation costs. While video conferencing (Skype) interviews were planned in the case of participants being located outside of the 50km radius from Tygerberg Hospital, only one of the participants qualified for such an arrangement. However, she did not have access to these internet-based services, and the telephone that she did have access to was shared amongst her colleagues and could not be used for such a length of time. Therefore, this interview also took place face-to-face at a mutually convenient public location.

The interview process consisted of an initial discussion and signing of the informed consent document in the participant's language of choice, followed by the opening questions of the interview guide in the corresponding language of choice of the participant. Based on what information was touched on by the participant during these opening questions, the researcher posed the intermediate questions in a conversational manner of building upon the remarks of the participant. The exact order of the questions and the wording used was also adapted to each participant to allow for the natural flow of dialogue. Finally, the closing questions were posed as a method of summarizing the information that was previously discussed and providing an opportunity for additional comments or remarks that had not yet been covered during the interview. The interviews took between 25 and 50 minutes to complete and were recorded using an audio recording device that belongs to the researcher in her private

capacity. Each participant was aware of the audio recording device, and consented to the recording of the interview.

Data Analysis

It is highly recommended that the analysis of the data of any qualitative study take place simultaneously with the data collection process. In fact, Merriam and Tisdell (2016) describe a qualitative design as being emergent, in the sense that the analysis of the collected data often leads the researcher to the next avenue to be explored or the next participant to collect more data from. Merriam and Tisdell (2016) further point out "…without ongoing analysis, the data can be unfocused, repetitious, and overwhelming in the sheer volume of material that needs to be processed." Therefore, the process of data analysis commenced concurrently with the process of data collection during the course of this study. The six steps of qualitative data analysis as set out by Creswell and Guetterman (2019) informed the process of data analysis. This process is illustrated by the figure below.

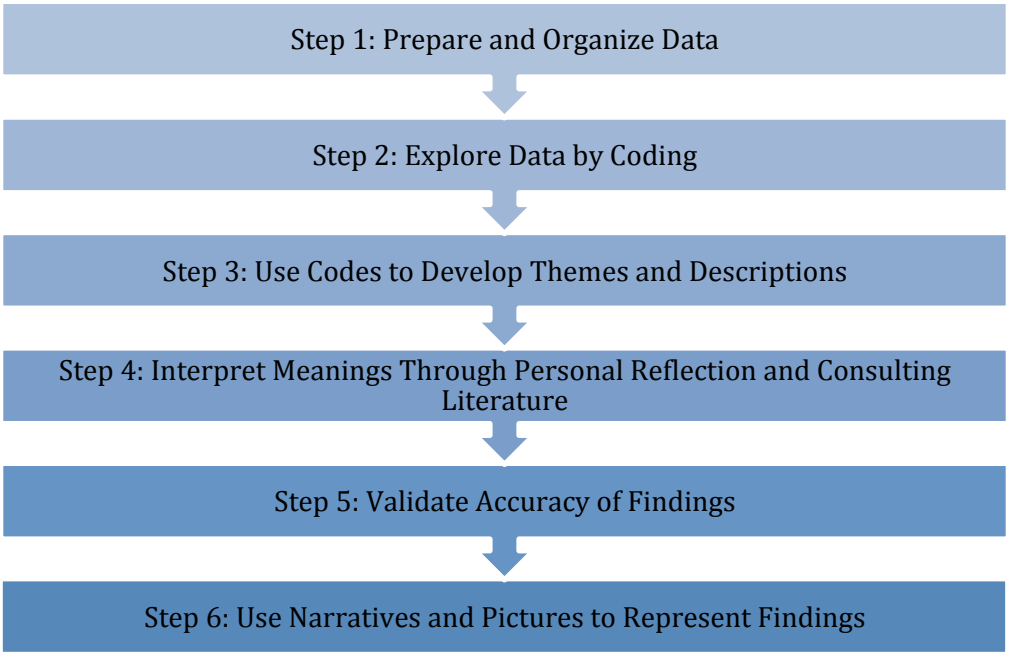

Figure 2: Data Analysis Process

Once the data was obtained from the participants in the form of the audio recordings of the interviews, these recordings were then transferred to the researcher's laptop computer, and the researcher then transcribed each interview verbatim onto a word processing document. This process of transcription represents the first step of analyzing the data, namely that of

preparing the data for analysis by means of organizing it (Creswell & Guetterman, 2019). In the case where the interview did not take place in the language of analysis (English), the established code list was applied to the corresponding Afrikaans data, and new codes emerging from the Afrikaans data were also assigned in English.

The second step involves coding the data as a means to embark upon an initial exploration of the information at hand. This step was accomplished by importing the transcription documents into the ATLAS.ti software, and then reading through the data in order to become familiar with the contents. Agar (1996) recommends reading the transcripts in their entirety several times in order to immerse oneself fully in the data. Once this was achieved, the data was examined again, and segments of text that represented partial answers to the research question were then identified and coded by assigning a descriptive label to each segment that aimed to accurately summarize that particular segment. The method of "open coding" was employed, where any segments of data that appeared to be potentially relevant to the research question were coded on the first reading. Furthermore, the criteria for coding segments or units of data as described by Lincoln and Guba (1985) were also applied, namely: a unit must reveal information that is relevant to the study but also stimulates the reader to think beyond that one unit of information; and a unit must be understandable in the absence of other information, therefore it must be the smallest unit of data that can stand alone and still be understood. Both the student and the supervisor undertook the process of coding. The student researcher generated the initial code list, and the codes were verified and refined in consultation with the supervisor . After these various methods were applied and an initial set of codes was established, any redundant or irrelevant codes were removed, and then the code list was re-applied to the data to determine whether new codes emerged (Creswell & Guetterman, 2019). These open codes were also grouped together into categories through the process called analytical coding, whereby interpretation and reflection on the meaning of the codes leads to the classification of similar codes into appropriate categories. These categories represent recurring patterns within the data. (Merriam & Tisdell, 2016).

Once the code list was finalized and categories had been generated, the third step of the data analysis process, namely the generation of themes, took place. This was achieved by reducing the code list into a concise group of themes by assigning similar codes to a theme in order to produce a single comprehensive idea. These themes were identified by examining the codes for information that was repeated frequently among the different participants, information that

was unexpected or unique, and information that had significant support in the literature or would have been expected to emerge from the study of a similar phenomenon. The themes were then each assigned a short, descriptive label in order to summarize the overall experience of the participants. The number of themes was limited to 5-7 themes, so that the resulting description of these themes would be an in-depth, detailed description rather than a broad or general description of many themes. Where possible, multiple perspectives were included into the development of a theme in order to provide support and evidence for the theme. Furthermore, the process of layering themes was employed to differentiate between major and minor themes. Minor themes were incorporated into major themes, and major themes, in turn, fell under even broader overarching themes. This process was selected in order to lend an extra level of complexity to the analysis process. The thematic analysis step was terminated after saturation had been achieved, and no new evidence arose from the data to support new themes or enrich the description of the existing themes (Creswell & Guetterman, 2019).

During the fourth step of the analysis of the data, the interpretation of the findings took place. This step was comprised of the researcher taking a broad view of the results of the study as a whole in an attempt to arrive at an understanding or explanation of the phenomenon. This understanding was furthermore achieved by taking several aspects, such as comparison to existing literature, and the researcher's own personal views, into account. During this step of the analysis, limitations and weaknesses of the study also came to light, and were included in the interpretation and discussion of the findings along with the recommendations for future research. The fifth step of qualitative data analysis refers to the validation of the research findings, and this is usually achieved by making use of strategies such as triangulation or member checking to ensure that the research findings, and the subsequent interpretation of those findings, is accurate and credible. With regards to this study, the strategies of member checking, triangulation, and bracketing were employed in order to validate the findings of the research (Creswell & Guetterman, 2019). These strategies are discussed in more detail under the section entitled "Quality of the Research."

In the final step of the qualitative analysis of the data, the data was represented visually by means of comparative tables of noteworthy quotations of responses to certain questions, and a hierarchical tree diagram of the various layered themes. The demographic information of the participants was also summarized in a table. The findings were then reported in a narrative

passage discussing the various findings in detail and also providing a summary of the various outcomes of the study (Creswell & Guetterman, 2019).

Quality of the Research

Researcher Bias

Within qualitative research, the researcher him-/herself is considered the primary research instrument. Therefore, it follows that the inherent shortcomings and biases of the human instrument must be accounted for so as to minimize the influence on the research findings. In fact, Creswell and Poth (2018, p. 45) caution "…all research is interpretive, and the researcher should be self-reflective of his or her role in the research, how he or she is interpreting the findings, and his or her personal and political history that shapes his or her interpretation." The method of acknowledging and setting aside the researcher's preconceived ideas and judgments is known as "epoche," and forms part of the overall process referred to as phenomenological reduction (Lichtman, 2013). Epoche furthermore includes the process known as bracketing. Bracketing refers to an attempt to temporarily set aside assumptions and prejudices to "examine consciousness itself." Thereby, the researcher proceeds on the basis that they know nothing about the phenomenon being studied, whereas the participants in the research are considered to be the experts on the phenomenon in question (Merriam & Tisdell, 2016). This method was applied throughout the research process, and the expectation was that the effect of researcher bias would be minimized in relation to the findings of this study.

Translation Concerns

As a result of the data being collected in two languages, namely English and Afrikaans, concerns could have arisen regarding the reliability of translations or cross-linguistic analysis, especially with regards to the correct application of an English code to a corresponding unit of Afrikaans data, despite the researcher herself being a bilingual speaker of both languages. Findings derived from this analysis and supporting evidence, such as direct quotations from the original (Afrikaans) transcripts, subsequently also ran the risk of being inaccurately translated. In order to avoid these pitfalls, a portion of the translated materials were back-translated by a bilingual third party. The third party satisfied the following criteria: a bilingual user of English and Afrikaans (competent in both spoken and written language), and at least a high school graduate education level. This process of back-translation involved the third party translating the English findings or quotations derived from Afrikaans data back into the

original Afrikaans, which were then compared with the researcher's translations. The researcher and the third party discussed differences in translation, and consensus was attained regarding the optimal translation. This process served to improve the accuracy and reliability of the translation.

Authenticity of Findings

To enhance the accuracy of the research findings and validate the interpretations, several methods were employed. The first method, known as triangulation, usually implies a process of verifying evidence by collecting different types of data, such as case studies and field notes, different individual sources, or different methods of data collection, such as interviews and surveys. In this study, the process of triangulation was employed in terms of different individual sources, and multiple information sources were examined in terms of supporting evidence for the various themes that came to light (Creswell & Guetterman, 2019). To this end, multiple participants' perspectives were used as discrete, individual sources of information, and each participant's perspective was then examined in relation to the various themes that emerged so that supporting evidence for these themes could be established.

Chapter 4: Research Article

Abstract:

Objectives: This qualitative research study aimed to investigate the perspectives of SLTs providing early communication intervention (ECI) services within the multicultural and multilingual environment of the Western Cape public healthcare sector.

Background: Communication delays are the most common impairment in early childhood. Appropriate and early intervention can limit the negative impact of such delays across the child's lifespan. Little research knowledge is available regarding the nature of ECI services in the South African public health sector. Therapists' perceptions can be valuable in understanding the facilitators, challenges, and opportunities to good quality ECI services.

*Metho*d: Data was collected by means of semi-structured interviews with 7 speech and language therapists using an interview guide. Each interview was recorded and then transcribed verbatim. Finally, open coding was applied to the transcripts, and findings emerged in the form of several themes and subthemes.

Results: The main findings that emerged from the study were; the main differences between the current and ideal ECI; challenges and facilitators to ECI service delivery; and achieving ideal ECI service delivery. Several recommendations were made by the participants, including a renewed emphasis upon training candidates that represent the cultural and linguistic characteristics of the communities that they serve; revision of policies regarding the availability of posts; and use of a group therapy approach where possible.

Conclusion: The findings of this study represent a clear contrast between the current realities that ECI interventionists face and the ideal service delivery to which they strive. Several recommendations were made by the participants in the light of these findings, especially with regards to the current needs and disparities evident in the field of ECI in the public sector.

Key Words:

Early Intervention;
Speech-Language Pathology;
Communication disorder;
Health promotion.

Introduction

Early communication intervention represents a relatively new development in the profession of Speech-Language Therapy in South Africa as it was introduced to the profession as recently as 1997, by means of the position statement issued by the South African Speech-Language Hearing Association (Kritzinger and Louw, 2003.) This field has become crucial, especially when one considers the prevalence of difficulties in communication development. A study conducted by Van der Linde, Swanepoel, Sommerville, Glascoe, Vinck, and Louw (2016) in the Tshwane district of Gauteng, revealed that 13% of infants between 6 – 12 months of age presented with diagnoses of communication delays. This prevalence is influenced by risk factors that are often present among children from low socioeconomic backgrounds, such as poverty, limited prenatal care, lack of stable residence, and high residential density, (Van der Linde et. al., 2016). Members of the low socioeconomic status group in South Africa are often also members of racial and cultural groups who were historically disadvantaged, due to the apartheid policies the country . While the implementation of primary health care has made strides in addressing these historical discrepancies, many areas are still underserviced due to challenges such as imbalances in resource allocation, migration of professionals, and the unequal distribution of professionals in the public and private sectors (Dookie and Singh, 2012).

Speech-language therapists in South African are faced with a multitude of challenges. Foremost among these is the insufficient number of qualified professionals to adequately serve the population. As of 1 October 2018, a total of 2,696 speech-language therapists (including dual-qualified speech-language therapists and audiologists) are registered to practice and serve the entirety of the South African population (Health Professionals Council of South Africa, 2018.) These professionals are also unequally distributed between the private and public sectors and often do not represent the cultural and linguistic diversity of the population that they serve, furthermore limiting access to these services (Pascoe and Norman, 2011.)

Early communication intervention constitutes a crucial component of the service delivery by speech-language therapists, but the perspectives of these professionals have not been investigated in relation to the abovementioned challenges within the multicultural environment of the Western Cape public healthcare sector. Furthermore, recommendations to appropriately address these challenges, based on the abovementioned perspectives do not

exist. As of the date of writing of this article, a handful of research articles on the topic of early communication intervention in the South African context are available, and the majority of these articles are between 10 and 20 years old. While the existing body of research into this particular topic is growing, a significant gap in knowledge still exists.

The main aim of the study was to examine the perspectives of speech-language therapists employed in the public sector in the Western Cape regarding early communication intervention.

Research Methods and Design

This study was conducted using the descriptive phenomenological method of qualitative inquiry. This method was selected since it aims to "…describe the common meaning for several individuals of their lived experiences of a concept or phenomenon" (Creswell and Poth, 2018.) Thus, the research design was descriptive and exploratory in nature, and made use of in-depth, semi-structured interviews that were guided by an interview guide composed of open-ended questions.

Setting: The study was conducted in the Western Cape province of South Africa, and aimed to include information from each health district of the province, namely: Cape Town Metropolitan Municipality, West Coast District Municipality, Cape Winelands District Municipality, Overberg District Municipality, Eden District Municipality, and Central Karoo District Municipality.

Study Population and sampling strategy: The study population comprised of the speech-language therapists employed in the public sector in the Western Cape. Purposeful sampling was used to select participants based on a variety of inclusion criteria, as set out below (Table 1). The participants that took part in the study were 7 female speech- language therapists, ranging between the ages of 25 and 45 years. These therapists had a wide variety of experience in providing ECI services, ranging from 1,5 to 20 years of experience in working with this population. The therapists also represented a diverse selection of healthcare institutions as workplaces, from tertiary hospitals to rural district institutions such as community health clinics. The majority of the participants had spent some time working in the private sector, however brief, but had all returned to the public healthcare sector at some point after the completion of their community service year.

Table 1: Participant Selection Criteria

Participant Selection Criteria
Qualified speech-language therapist, post community service (graduated before 2018) Employed in the public health sector of the Western Cape province of South Africa Current case load includes services to 0 – 3 year-old children, or recent experience managing such cases (within 12 months of taking part in the study)

Data Collection: Data was collected by means of individual, face-to-face, semi-structured interviews with qualified speech- language therapists currently employed in the public sector that met the criteria for participation in the study. The interviews were conducted in English or Afrikaans, depending on the preference of the participant, as the interviewer (first author) was fluent in both languages. The interviews took place at the workplaces of the participants, and at a mutually convenient public location in the case of one participant.

An interview guide with 10 open-ended questions was used to guide the semi-structured interviews (please see Appendix E for a copy) The interview guide was designed by the interviewer (first author) based on the research question, and is original in the sense that other guides or question lists were not adapted or used as the basis of this interview guide. The second author reviewed the interview guide and provided feedback. Thereafter, a pilot study was conducted with one participant in order to test and refine the content and format of the questionnaire and the interview process. The only change that resulted from the pilot study was made to the wording of one of the questions, which was altered to lend more clarity to the type of information expected from the participant.

Data Analysis: The interviews conducted with the participants were audio recorded and transcribed verbatim by the first author. The participants' responses to the interview questions were coded using ATLAS.ti software, and then analyzed by means of thematic analysis in order to bring patterns or themes to light in relation to the research question (Braun and Clarke, 2006.) Data analysis and data collection was concurrently performed.

Ethical Considerations: Permission to conduct the study was obtained from the Health Research Ethics Committee of Stellenbosch University (reference number S19/02/044) and

the Western Cape Department of Health. Informed consent was obtained from all participants before the interview process, and no participant was interviewed in the absence of a signed consent document. Furthermore, all participants were free to withdraw from the study at any stage without incurring negative consequences. In order to ensure that the rights of the participants were not infringed upon, confidentiality was maintained throughout all phases of the research.

Findings

This study yielded insight into the multi-faceted reality of ECI service delivery in the Western Cape public health care sector from the perspective of seven speech-language therapists. The findings have been organized into six themes and further divided into five subthemes, which form part of two distinct vantage points from which ECI service delivery in this province may be observed. These broad viewpoints are that of the current reality of service delivery, as well as a perceived ideal form of service delivery. The six main themes are: a description of the current ECI service in the province; the challenges faced by SLTs; facilitating factors for good service delivery; suggested improvements to the current ECI service; the characteristics of ideal ECI services; and the expected outcomes of ideal ECI service delivery. Please see below for a graphic representation of the relationship between the various themes and subthemes (Figure 2). These are described and discussed in depth in the master's degree thesis by the first author (complete citation after acceptance of thesis).

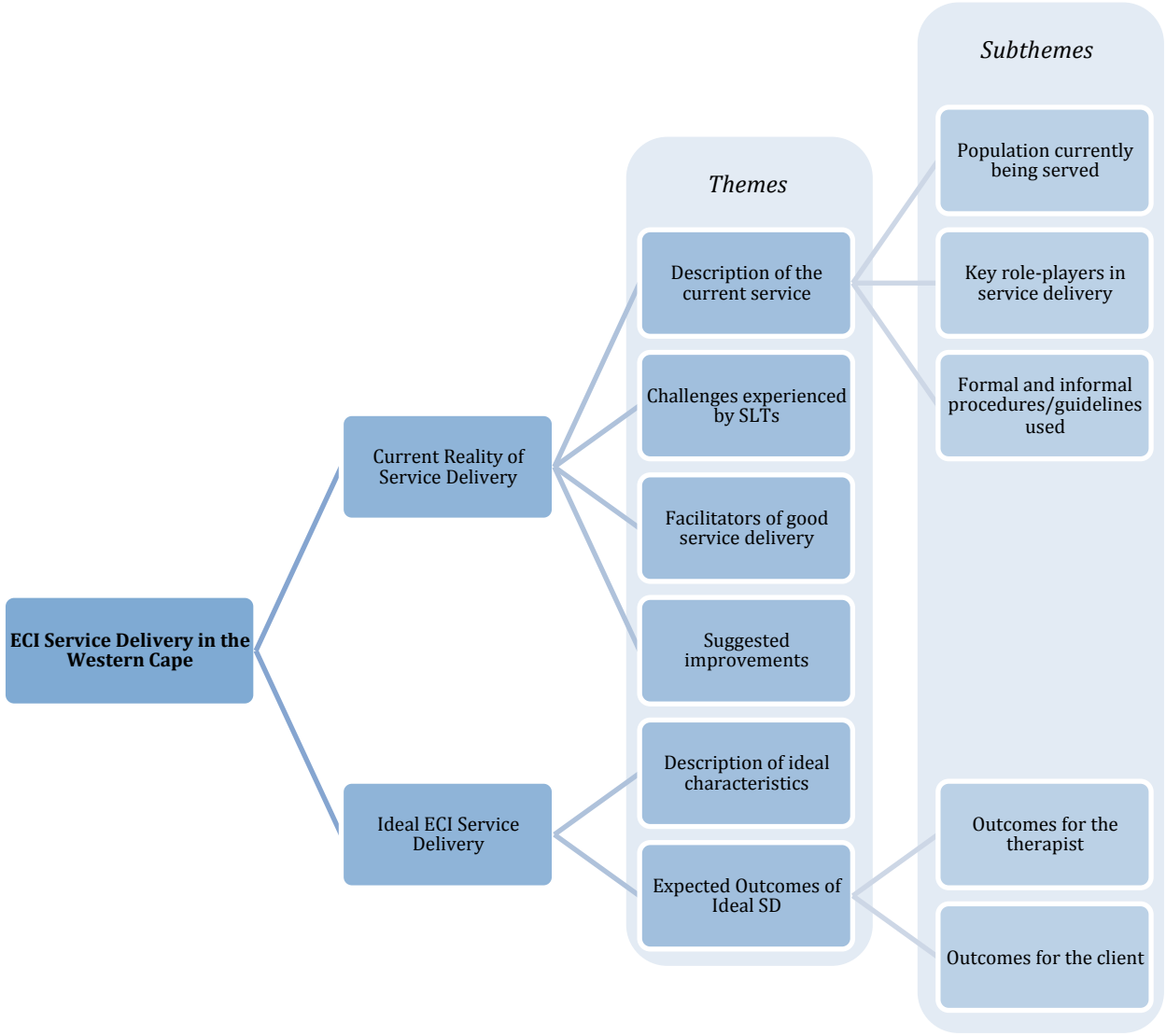

Figure 1: Themes and subthemes

For the purposes of this article the key findings are summarised below under three separate headings.

Main differences between current and ideal ECI

The participants' overall experience of ECI service delivery was characterized by considerable pitfalls with regards to the healthcare system and the community. In relation to the healthcare system three of the most conspicuous pitfalls were, long waiting lists for services; understaffed departments; and overburdened therapists. In contrast, ideal ECI

service delivery was described in terms of success in early identification of children in need of ECI and multi-disciplinary collaboration toward common treatment goals. Other key characteristics of ideal ECI described by the participants included improved knowledge of the importance of early identification and warning signs with regards to developmental norms on the part of caregivers and other healthcare professionals, health promotion within communities, and several adaptions to the therapy process. These adaptions included an increased number of therapists and therapy resources, a combination of group and individual therapy sessions, and active integration of speech-language therapy into other domains of the child's life by incorporating therapy goals and techniques into the social and educational environments.

Challenges and facilitators to ECI service delivery

SLTs in the South African public sector are confronted by a myriad of challenges. However, several interesting relationships emerge when these challenges are viewed in relation with the facilitating factors to good service delivery highlighted by the participants. Two of the most crucial facilitating factors in terms of mitigating the challenges faced were the use of ECI groups and partnerships with other team members.

The use of ECI groups may potentially improve service delivery on the part of the therapist by mitigating the challenges of a large caseload and time constraints. Group-based ECI services may also address patient-related challenges such as the socio-economic difficulties in terms of more frequent transportation costs. This aspect was particularly noteworthy due to the overall limitations of access to healthcare services imposed by the widespread poverty in the country (Samuels, Slemming and Balton, 2012). To this end, a child (and his/her caregiver) might attend one group session per month instead of weekly individual appointments. While weekly therapy sessions may be a more effective approach with regards to the rate of progress, this option is often not feasible in the context of the various challenges faced, such as the vastly overburdened public healthcare system (Kaipa and Peterson, 2016). Thus, the monthly group sessions may serve to pool the SLT's and the clients' resources to support the therapeutic process. The group setting also provides an opportunity to mitigate the effects of a cultural and/or linguistic mismatch between the therapist and client, whereby other members of the group could potentially assist in bridging the communicative or cultural gap and thus making the ECI services more accessible and appropriate. Partnering with ECI team members, such as rehabilitation care workers, and other potential team members, such as

preschool educators, could potentially play a significant role in further alleviating some of the burden on the SLT. Additionally, the challenges of transportation costs may be further reduced as a result of fewer follow-up appointments with the SLT. ECI team members may also represent the client's linguistic and cultural group and could further serve to mitigate the possible cultural or linguistic mismatch between the SLT and the client.

At the macro-level, the following challenges emerged as those most in need of being addressed: governmental policy regarding the number of posts available and the procedures for appointing new candidates who currently might not represent the linguistic or cultural characterisitics of the communities they serve, awareness among colleagues in the healthcare setting and the community regarding the value of ECI, and culturally and linguistically appropriate assessment and intervention materials for the population being served.

Achieving ideal ECI service delivery

ECI in the Western Cape province public sector is complex and multifaceted, fraught with challenges but filled with passionate and dedicated interventionists. Many facilitating factors were identified which serve to mitigate the severity of the challenges, and several suggested improvements may further pave the way for an ECI service that more closely resembles the ideal. Initiatives such as the compulsory community service program for health professions graduates, attempt to improve access to health services in areas where these have historically been (and continue to be) very limited. However, until the underlying pitfalls are addressed and resolved, it seems unlikely that a truly ideal ECI service will be fully realized. Taking steps toward addressing the main challenges mentioned earlier, could result in large strides being made towards an improved ECI service in the Western Cape.

Limitations

The following limitations arose during the course of the study: challenges surrounding the approval of the governing bodies, such as the Western Cape Department of Health and the City of Cape Town Municipality, to conduct the study; and a small sample size due to several potential participants who declined as a result of time constraints. As a result, the sample size of this study was limited to 7 participants. The estimated total population of both audiologists and speech and language therapists in the public sector of the Western Cape at the time of

writing was 80, including those who are permanently employed, completing their community service, and sessional workers.

Recommendations

Several recommendations may be made in the light of the findings of this study, especially with regards to the current needs in the field of ECI in the public sector. Firstly, with regards to the education and training of SLT's, there is a clear need for the communities that are most in need of our services, to be represented by professionals in the field of speech-language therapy. Secondly, it is recommended that policies be revised at the governmental and institutional level with regards to the availability of public sector posts, as well as the selection procedure for health care employees. Thirdly, it is recommended that the utilization of rehabilitation care workers as ECI team members and the implementation of group therapy sessions be included into all ECI service delivery programs where such opportunities exist. Finally, in relation to future research in this area, it is recommended that efforts be made to better understand the issue of effectively addressing the language differences faced by therapists and their clients, as well as to provide therapists with evidence-based suggestions or guidelines that may be realistically applied to their various settings.

Conclusion

This qualitative research study investigated the perspectives of SLTs providing early communication intervention services within the multicultural and multilingual environment of the Western Cape public healthcare sector. Data was collected by means of face-to-face semi-structured interviews with 7 qualified speech and language therapists, and data analysis by means of thematic analysis yielded findings in the form of various themes and subthemes. The main findings of the study demonstrated a clear contrast between the current realities that ECI interventionists face and the ideal service delivery to which they strive. Current ECI service delivery was characterized by a number of significant obstacles in relation to the healthcare system and the community. In contrast, ideal ECI service delivery was characterized by early identification of communication difficulties and multi-disciplinary collaboration toward common treatment goals. While a myriad of challenges exists at the macro and individual levels, two of the most crucial facilitating factors in mitigating the challenges faced were the use of ECI groups and partnerships with other team members.

Finally, while the realization of a truly ideal ECI service delivery may be unlikely at the present time, great improvements could be achieved by addressing the main challenges.

The following recommendations have emerged from the findings: a renewed emphasis should be placed on training individuals who represent the communities that are being served; governmental and institutional policies regarding the availability of posts should be revised; rehabilitation care workers should be included as ECI team members when possible; a group therapy approach should be applied when possible; and future research should be conducted in order to address several issues that came to light during this study, such as language barriers and therapist burnout.

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Competing interests

The authors declare that they have no financial or personal relationship that may have inappropriately influenced them in writing this article.

Author contributions

The study was conceptualised by the two authors. The first author designed the interview protocol, and then collected and analysed the data. The interview transcripts were read by both authors, and decisions regarding data analysis were reached mutually. The first author was responsible for the formulation of the first draft of the manuscript, and the second author extensively reviewed it. The manuscript was circulated between the authors until it was deemed acceptable for submission.

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Data availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Disclaimer

The views expressed in this article are those of the authors, and do not reflect an official position of any institution.

Chapter 5: Findings & Discussion

This study has yielded insight into the multi-faceted reality of ECI service delivery in the Western Cape public health care sector from the perspective of seven speech-language therapists. The various findings have been organized into six themes and further divided into five subthemes, which form part of two distinct vantage points from which ECI service delivery in this province may be observed. These broad viewpoints are that of the current reality of service delivery, as well as the ideal service delivery. The findings of the study were obtained by means of qualitative data analysis, and provide insight into the various strengths and weaknesses of ECI service delivery at both the system and individual level. The six themes that emerged from the findings are: a description of the current ECI service; the challenges faced by SLTs; facilitating factors for good service delivery; suggested improvements to the current ECI service; the characteristics of ideal ECI services; and the expected outcomes of ideal ECI service delivery. Please see Figure 1 below for a representation of the relationship between the various themes and subthemes.

As discussed in the Methodology section, the process of layering themes was employed to distinguish between major and minor themes. Two of these major themes, namely the description of the current service; and expected outcomes of ideal ECI service delivery, include several minor themes as a result of the richness of data supplied by the participants in relation to these topics. With regard to the other major themes, saturation was achieved more quickly and therefore additional minor themes were not identified.

Throughout the description of the various themes, the researcher made use of direct quotations obtained from the interview transcripts in order to illustrate or emphasize a given finding. These quotations have been included in either English or Afrikaans (depending on the original language used by the participant), followed by the translated English quotation in italics where necessary. The quotations have been included verbatim, and where the meaning of the quotation may have been unclear or context for the quotation was required, additional information has been provided between brackets.

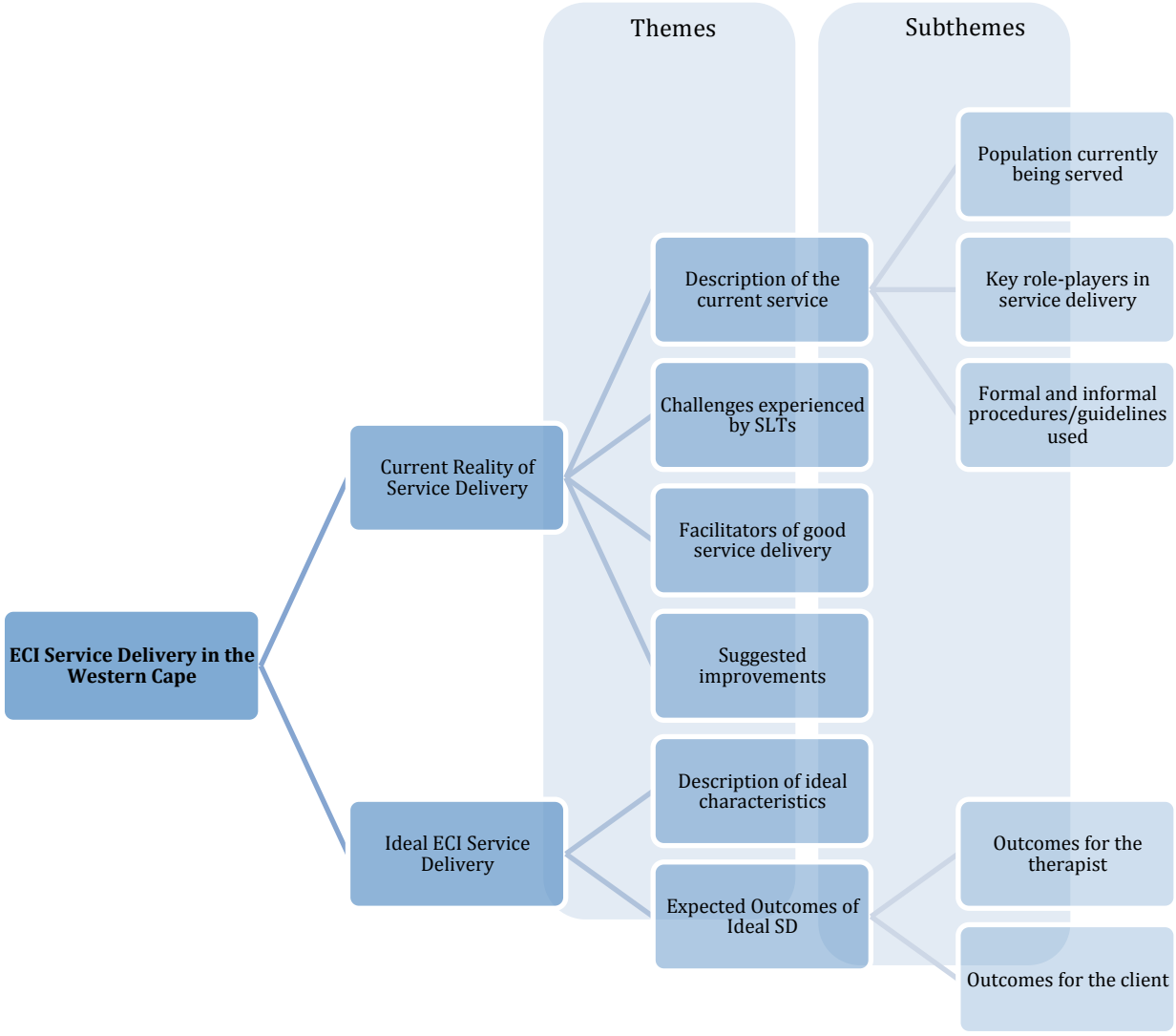

Figure 3: Tree Diagram of Themes

Current Reality of Service Delivery

Description of the Current Service

This theme has been further sub-divided into the following subthemes: the population currently being served; key role-players in service delivery; and formal and informal procedures or guidelines that are being used. With regards to the population that is currently being served, the participants identified the following groups as those patients that would typically make use of their ECI services: children with known medical diagnoses, such as cerebral palsy, Down's syndrome, or autism spectrum disorder, who are identified by the

participants at various out-patient clinics or within hospital wards, or who are referred by colleagues from other out-patient clinics; children who are suspected of having an underlying medical condition and are in the process of attaining a diagnosis; and children who present with a speech or language delay in the absence of a specific medical diagnosis. In terms of the cultural and linguistic characteristics of the population being served, the participants described mainly encountering English, Afrikaans, and isiXhosa speaking patients and families who are of South African nationality, with some instances of other language groups such as French or Shona speaking patients from neighboring African countries such as Zimbabwe, Somalia, and Democratic Republic of Congo.

The second subtheme in the description of the current ECI service refers to the key role-players in the service as perceived by the participants. Several participants indicated that their colleagues in other healthcare professions, such as occupational therapists, dieticians, nursing sisters, audiologists, and paediatricians are crucial role-players in the delivery of their ECI service. These healthcare professionals often act as referral agents with regards to identifying potential patients who may be in need of ECI services. Other professionals that were considered to be key role-players include rehabilitation care workers and preschool teachers. Interestingly, only three of the participants mentioned the parent or caregiver as an important role-player in the ECI service, where the literature indicate that family-centered intervention is of paramount importance (SASLHA, 2011). In fact, Kaiser and Roberts (2012) go so far as to say that "Teaching and supporting partners (parents, caregivers, teachers, and peers) are essential to successful child communication intervention." Participant C echoed this statement by pointing out "The parents are crucial, they really need to be the advocate for their child."

The third subtheme refers to the formal and informal procedures or guidelines that the participants use in order to deliver the ECI service. Almost every participating speech and language therapist specifically highlighted the fact that, due to the lack of standardised materials that are culturally and linguistically appropriate for the population they each serve, informal procedures and the use of developmental norms as guidelines may be thought to form the backbone of their services. These informal procedures are often existing assessment materials, such as the Rosetti Infant-Toddler Language Scales, that are informally adapted by the therapist to suit the needs of each individual patient and guide the subsequent intervention process. Several participants emphasised the fact that these existing assessment materials could only be used informally, as they are standardised to other populations. Participant G

aptly remarked, "…so baie van hierdie formele goed wat ons kry van Amerika en Brittanje is regtig nie van toepassing op ons gemeenskap nie." (Translated: "...so many of these formal things that we get from America and Britain are really not applicable to our community.") Another tool that was highlighted with regards to guiding the assessment and intervention services was that of developmental norms. Participants described using these norms as informal guides within the realm of assessment, and then applying these norms to their treatment goals as guidelines. However, one should be mindful that the majority of developmental norms are typically developed within European or American contexts, and are then applied to children from a vast array backgrounds (Nsameng, 2008). Furthermore, the protocols as determined by the various healthcare institutions where the participants worked were also cited as useful with regards to guiding assessment, intervention, and any subsequent referrals to other healthcare professionals. This significant reliance on informal guidelines and materials relates to Chambers, Stronach, and Wetherby's (2016) findings that there is still a substantial shortage of culturally and linguistically appropriate assessment instruments and materials suited to the unique South African context, as well as the broader African context.

With regards to the intervention process in particular, many participants described emphasising either individual intervention, group-based intervention, or a combination of the two where possible. The focus of the intervention services, in whichever format they occurred, was largely on parent training rather than being solely focused on the child him/herself. Participant B explained "So die ouer opleiding deel – met daai ouderdomsgroep is dit amper vir my meer gefokus op die ouer, en moet dit eintlik wees, as met die kindjie self." (Translated: "So the parent training part – with that age group it [intervention] is almost more focused on the parent, and it should be, than on the child him- or herself.") The parents were described as being equipped with specific skills and knowledge to stimulate their child's language within the home environment, following a demonstration of the relevant skills by the therapist. Home programs in particular were highlighted as being a crucial aspect of the intervention services to the birth-to-three-year-old population. This concurs with the findings of previous research, which suggest that members of the child's family are essential members of the intervention team, who, when trained, informed, and supported, can model new skills, modify their own responses, teach new communicative forms and functions, and respond to the child's attempts at communication, all within the natural context of the family (Kaiser and Roberts, 2012).

Finally, in terms of the overall satisfaction that the participants experience in relation to the current reality of their ECI service delivery, the majority of the participants expressed that there is still much room for improvement. Participant D pointed out "Well, you know, the thing is you always think you can do more. You can never really be satisfied, because there is so much we could do." Some ECI services were described as very newly established (within the past 3 years), with much growth still to occur, and the further development of the service being important. Others pointed to specific challenges, such as the lack of culturally or linguistically appropriate resources, as dissatisfying factors within their ECI services. These challenges, among the others that are being faced by the various speech and language therapists, will be discussed comprehensively in the following section.

Challenges experienced by Speech and Language Therapists

The various challenges that are experienced by the participants will be discussed in terms of the following broad categories: institutional challenges; challenges experienced by SLTs; and patient-related challenges.

Institutional Challenges

The first of the more macro-level institutional challenges is perhaps the most troubling – the severe lack of speech and language therapists appointed in public sector posts within the Western Cape to serve its entire population. Several of the participants of this study were the sole speech-language therapists appointed within an entire healthcare district, and one of the participants described the tertiary hospital where she is employed as being "severely under-staffed." Upon reflecting back on the statistics described in the first chapter of this study, namely that each registered speech language therapist and/or audiologist is responsible for approximately 19, 188 members of the South African population (Statistics South Africa, n.d.), one can understand the frustration expressed by Participant C in saying "You can't have just one [speech and language therapist] in a district for a whole community, that's just impossible!"

Infrastructure is a second institutional challenge that was highlighted by several participants as impeding their service delivery. Participant B described complaints she received from parents who attended a group therapy session with their children regarding the small size of the room, which was the only space available for the session. She also explained that some of

the spaces in her work place are not available for her use, saying "Ek mag nie, byvoorbeeld, die gym gebruik nie, want daar's vier fisios wat die gym gebruik, en dan nog twee OTs ook, so hierdie is my kantoor, dis waar ek pasiente sien…" (Translated: "I may not, for example, use the gym, because there are four physios that use the gym and two OTs, so this is my office, where I can see patients…") This is particularly concerning in relation to the desire expressed by several of the participants to offer group-based services, which they are unable to do at the moment because of limitations in the available therapy space. Participant B particularly highlights this limitation in stating "Ek het nie die spasie of die fasiliteit om groepe te kan doen nie. So my pasiente wat in groepe moet kom word… by die dag hospitaal gesien." (Translated: "I do not have the space or the facility to do groups. So my patients that must come in groups are seen… at the day hospital.")

The third institutional and departmental challenge highlighted by participants is that of unsatisfactory management. Participant A explains the pivotal role that leadership could play in improving her current service delivery, which she believes is unfortunately currently lacking. "So I think that most of our problems on the primary health care level is not – it's not that it doesn't start here but once you take it up further and you ask for finances to buy resources for your department or you are experiencing difficulties with implementing things at the hospital... people are scared to intervene at times. So they don't want to say something that will offend someone. So I feel like management is a problem."

Challenges experienced by SLTs

With regards to the second broad category of challenges, namely challenges experienced by SLTs, the following main obstacles became apparent: a large caseload; time constraints; limited resources; and individual training needs. Both the large caseload and time constraints may be considered at least somewhat consequential to the previously discussed shortage of speech and language therapists appointed in public sector posts. The term "time constraints" in this context refers to the time that a given therapist has in terms of available therapy slots. In order to illustrate the relationship between the large caseload and time constraints, Participant F explains "So because the caseload is so large and I can't be at every clinic every week, so I see them, at the moment it's once every three months because of the amount of patients." Participant B aptly remarked "Jy kan net soveel kinders inpas, en daar's lang waglyste." (Translated: "You can only fit so many children in, and there are long waiting lists.")

Another challenge in the category of challenges experienced by SLTs is that of limited resources. Participant A explained that the only resources she has are those she has obtained from her time at university, with limited resources being available since then, especially since her department at her institution is quite new. Participant A: "Uhm, so, because this is a new speech therapy department, we have limited resources. So I use what I have obtained from university level onwards, so resources are a problem." Another participant described resources such as pamphlets and programs supplied by the Department of Health to other professionals such as dieticians, but not to her profession. Several participants also highlighted a lack of funding to their departments as crucial to their limitations in resources, Participant B so far as to say "So ons moet dit net aanvaar, want daar is nie geld nie…" (Translated: "So we must accept it [current situation], because there is no money...")

The third obstacle to be discussed with regards to challenges experienced by SLTs refers to the specific training needs of each individual therapist. Several participants pointed out that there is always more to learn in this field, especially in relation to some of the specific medical diagnoses that they have been confronted with. Furthermore, participants expressed a desire to attend courses specifically dealing with ECI for example, but that these courses are not offered in their city or even in their province.

Patient-related challenges

The final category in the broad theme of 'challenges experienced by SLTs' deals with patient-related challenges, which includes the following specific challenges: the multilingual and multicultural population; socio-economic difficulties; buy-in on the part of various role-players; and role-player knowledge. Several participants described the diverse linguistic and cultural characteristics of the population being served in the Western Cape as a factor that presented challenges to their service delivery. The recent guidelines set out by the HPCSA (2019), encourages SLTs to view this diversity as an opportunity to improve their own cultural sensitivity and linguistic proficiency, rather than a stumbling block in delivering their services. With regards to the findings of this study, many participants identified Afrikaans, English and Xhosa as being the main languages spoken by their patients, while they described themselves as being proficient communicators in one or two of these languages, often with limited proficiency in Xhosa despite undergraduate training.

Rehabilitation care workers and parents were described as valuable translators in efforts to bridge these linguistic gaps, but concerns regarding informal interpreting services must also be considered. These concerns relate to possible unintentional mistranslations or skewed assessment results due to a lack of expertise regarding subtle dialectal differences (Southwood and Van Dulm, 2015) or assessment practices. Furthermore, many participants described providing services to persons of foreign nationalities, such as Zimbabweans, Somalians, or citizens of the Democratic Republic of Congo, who represent non-South African language groups such as French. In these cases, the language barriers were often compounded by not being able to rely on the informal translation services of colleagues or the patient's family members.

Cultural barriers were also highlighted as a specific challenge to the participants, and were often viewed as affecting the caregivers' expectations, knowledge, and insight into the therapeutic process. For example, Participant G pointed out that, in the community she serves, the father figure is not expected to be involved in the child-rearing duties of the household. She explains "So gewoonlik, waar die pa nie regtig volgens kultuur baie interaksie met 'n klein kindjie hoef te hê nie, so dit is die ma se werk, ja so uhm daar is defnitief iets wat aan kan gewerk word. As jy hulle kry om in te koop in jou terapie, dit help, maar jy sal sien hulle gee dit maar nogsteeds oor aan die ma op die einde van die dag." (Translated: "So usually, where the father is not really expected according to culture to have much interaction with the child, so that is the mother's work… If you can get them to buy into therapy, that helps, but you will see they still hand it [therapy tasks] over to the mother at the end of the day.") Another participant highlighted the lack of books in her patients' community, saying "But here it's like there is books, but books just don't exist in their home. Uhm, so it's something that you then have to make an effort to join a library. We don't expect them to buy the books, obviously, because it's expensive, but joining the library, it's something that's completely new to them."

Another challenge described by almost every participant was that of the perceived lack of investment on the part of other role-players, such as the child's caregiver(s) or other healthcare professionals, in the child's therapy. Convincing parents or colleagues to buy into the process of therapy and take personal responsibility for their role in the child's successful outcomes was described several times as a significant challenge. Participant E explains "I think my biggest problem, and I think the biggest problem that we also see with ECI is that

the parents think that if they come to you, you're gonna fix the child... So the parents are not taking any responsibility." This difficulty with caregiver buy-in was also illustrated by another participant's description of how few caregivers in her service take it upon themselves to call her and schedule a new appointment when they have missed a session. However, collaboration between the therapist and caregiver with regards to setting intervention goals, for example, has been demonstrated to improve the likelihood that recommendations will be adopted into the family's daily lives, thus resulting in more sustainable intervention efforts (Abdoola, 2015). Other healthcare professional colleagues were also described as not being invested in fulfilling their role in the child's speech therapy journey by assisting in certain tasks asked of them, such as being on the lookout for appropriate referrals or integrating language stimulation techniques into their services.

Limited knowledge on the part of the various role-players was also described several times as presenting a challenge to optimal ECI service delivery for the participants. Several participants pointed out that there is a clear need for health promotion and training sessions within the communities that they work with regards to typical communication development and warning signs of delays or disorders to look out for. Participant A stated: "I've identified a need for ECI and health promotion on early childhood development in my community, especially for children who are second language learners, and just children with specific language delays, because uhm the parents aren't very informed on how a child should develop because there wasn't, there hasn't been any speech therapist here to tell them about it. So I think that health promotion is something that we could do more frequently."

Two specific examples of pitfalls with regards to uninformed caregivers came to light. The first is that children are often expected to grow out of communication difficulties on their own, and the second is that the relationship between excessive screen time and early language delays is not clearly understood. With regards to the first pitfall, Participant E exasperatedly pointed out "Generally parents think that the problem will resolve once the child gets to pre-grade R because teachers are magically going to have something that makes it better… And the doctors also told them no but they must wait until the child gets to school." This quote highlights the need for health education among colleagues in the healthcare setting with regards to communication development and appropriate referral practices. It also brings to mind the effect that delayed communication development may have later in life when the child reaches school-going age, as Participant A described "They go home and they come

back to me when they're 4 or 5 years old and they have to go to school already, and then we struggle with school placement, that is a big challenge. Later on it is a bigger problem than it is now." The research literature resoundingly supports this statement. While approximately half of all so-called "late talkers" do catch up to their peers naturally as many caregivers expect, studies also show that many of them still present with persistently below-average overall language abilities at age 4, and thus present a continuing risk for poor communication development (Dale, Price, Bishop, and Plomin, 2003; Bleses, Makransky, Dale, Højen, and Aktürk Ari, 2016)

With regards to the second pitfall, another participant stated "And the biggest problem that I have with my parents is that they think a tablet and a TV can play the role of natural communication, and at the end of the day you've got a child who is unable to communicate anything." This sobering quote highlights the outcome that may result from a lack of information and guidance being offered to caregivers with regards to the hazards of unrestricted screen time, and the crucial need to empower caregivers with knowledge and training. While the relationship between screen time and developmental delays has been investigated in several studies in the past decade, screen time remains a reality in many households. Madigan, Browne, Racine, Mori, and Tough (2019) pointed out that excessive screen time interferes with opportunities for child-caregiver interaction, and is associated with a number of negative outcomes such as cognitive and motor delays. The World Health Organization (2019) recently published guidelines for children under five years of age, wherein they recommended no more than one hour of screen time per day for children between two and five years of age, with even less screen time being strongly encouraged.

Lastly, socio-economic difficulties were also a prominent factor reported by the participants as presenting a multitude of challenges to service delivery. The majority of the participants described transportation difficulties due to financial constraints as regularly impeding patient attendance. Participant G simply stated "Ons mense het nie genoeg geld om gereeld vir my te kom sien nie. (Translated: "Our people do not have enough money to come see me regularly.") The unreliability of public transportation, upon which most patients and caregivers are dependent, was also described as a substantial obstacle to service delivery. Samuels, Slemming, and Balton (2012) concur with the participants that poverty does not only increase a child's risk of communication delay, but it also limits his/her access to intervention services, sometimes preventing such access entirely. Finally, Participant C

highlighted the safety concerns of patients who attend clinics in low socio-economic areas where gang violence is especially prominent, saying "The situation at the clinics that you hear about people not wanting to go to clinic because it's not safe..."

Facilitators of Good Service Delivery

While the current reality of ECI service delivery is fraught with obstacles and challenges, as clearly illustrated by the previous section, the findings of this study also point to several facilitating factors within the existing system of public healthcare in relation to ECI services. When discussing those factors that assist them in delivering their ECI service, and that are already in place in their setting, the participants highlighted the following five facilitating factors: use of ECI groups; partnerships with other team members; their own personal knowledge/experience; access to resources; and opportunities for training and support.

In the cases that the participants considered it possible, logistically or otherwise, to host ECI group sessions, they unanimously described these group-based sessions as key facilitators of their ECI services. As evidenced by the following quote from one of the participants, group sessions were perceived to not only facilitate a good service from the therapist's side, but also to accommodate the various challenges that may be faced by the caregivers of her patients: "So I think it's great that we are able to provide groups, we've had a lot of positive responses, and... often they [parents] only can come once a month because of transport and money and work and all of that, so the groups actually work really well then."

Secondly, partnerships with other team members became an evident facilitating factor in the delivery of ECI services to several participants. These team members went beyond the traditional multi-disciplinary team of health professionals, however, to include preschool educators, non-governmental organizations such as Autism Western Cape and the Down's Syndrome Association, student speech-language therapists, and rehabilitation care workers. The valuable addition of the rehabilitation care workers to the public healthcare staff in the Western Cape in the past year was emphasized by two of the participants who had been exposed to collaborating with these professionals. Their contributions in the follow-up services and carryover of therapy techniques to the home environment were considered to facilitate the ECI services.

Another facilitator of ECI services that came to light through the course of this study is that of the therapist's own personal knowledge and experience. With regards to experience, the participants described having experience in working with the people in the community that they strive to serve, rather than only having experience in treating a given communication difficulty, as facilitating their successful service delivery. With regards to their personal knowledge, several participants discussed their efforts to stay up to date with the best practices in their field by reading the new research published, or participating in journal clubs in their workplace. The knowledge acquired over years of practice, as well as during undergraduate training, was also described as facilitating service delivery. Interestingly, one of the participants had a postgraduate qualification (Master's degree), but discussions surrounding increasing the participants' knowledge and training yielded a desire for access to short courses and workshops, rather than a desire for postgraduate training.

Closely related to the abovementioned knowledge and experience, many participants described the training and support opportunities offered to them as definite facilitators of their ECI services. Mentorship opportunities, whereby participants were able to learn directly from a more experienced therapist, were mentioned several times as being highly valuable to the participants' professional development. In the words of Participant D who is quite newly qualified, "Definitely guidance, that helps, and being able to access a therapist that I feel like is more experienced than me." Several participants also pointed out that their year of compulsory community service was of particular value to them in terms of their training. The participants also described attending short courses that dealt with specific diagnoses or skills, such as the HANEN approach, as valuable facilitators (The Hanen Centre, 2016).

The final facilitating factor discussed by the participants was that of access to resources. The term "resources" in this context includes access to finances such as the departmental budget, as well as therapy materials, both electronic (such as the Boardmaker software) and physical (such as appropriate toys). In some cases these resources specifically referred to those that the participants have created themselves or with their speech and language therapy colleagues, such as informal therapy programs and thematic home programs. Other participants expressed gratitude for the resources, such as therapy materials and toys, which they have gathered over time out of their own pocket and are thus able to access. Participant G in particular described the impact of having a line manager who has insight into her profession, and how this, in turn, influenced her access to her department's budget in order to obtain new resources.

Suggested Improvements

While the facilitating factors described in the preceding section certainly play a part in bridging the gap between the pitfalls created by the challenges and the optimal ECI service delivery, it is clear that there is still much room for improvement, as pointed out by a participant earlier in the chapter when she said: "Well, you know, the thing is you always think you can do more. You can never really be satisfied, because there is so much we could do." To this end, the following improvements have been suggested in order to optimize the current service delivery: appointment of speech and language therapists; hosting ECI groups; community health promotion; changes to infrastructure, and improved managerial insight.

With regards to appointing speech and language therapists to public sector posts, several factors came to light, namely a dire need for more available posts, as well as the critical importance of appropriate appointments. The latter includes the therapist's professional experience, linguistic profile, and their passion and commitment to their profession and community. Participant C pointed out how counter-productive it can be when a new therapist is appointed to a large district post directly after completing their community service, "…it's affecting people maybe being appointed fresh out of commserve who then needs to be trained from scratch, which takes up time from other therapists that they already don't have." Thus the professional experience of the therapist does not seem to be appropriately considered when new therapists are appointed.

Secondly, the language and even the culture that the speech and language therapist represent should be strongly considered when appointing new candidates. A participant explained "And with that I really think we need more people who represent some of the African languages that are spoken in our province... It really depends on where, because some areas speak mainly one language, so then you also have to strategically appoint people who can serve those people best by speaking their language, you know?" The emphasis on serving a given community in the best possible way by sharing their language is key in providing an optimal service, as SASLHA clearly suggests that a client should not be denied services in their mother tongue or language of choice due to a linguistic mismatch between the client and the therapist (2011). The HPCSA (2019) echoes this position throughout their guidelines for SLTs, emphasizing the responsibility that rests upon these professionals to serve their clients in the language of the client's proficiency. To this end, the value and lasting impact of

training a new generation of therapists who are representative of the various languages and cultures of the communities they serve cannot be underestimated.

Given all of the challenges faced by therapists every day, it should come as no surprise that the participants specifically pointed out that a potential new public sector speech and language therapist should be the most committed individual to their profession and community, and should be passionate about going the extra mile to serve them as best (s)he can. One particular participant pointed out "So I think in terms of appointing the right people, not people who just want a government post for example, appointing people who want to go the extra mile, I think that's step one." By allowing these factors to weigh more heavily in the process of appointing new speech and language therapists, the services that they deliver could, in turn, be improved. In fact, one could argue that allowing these very same values to carry substantial weigh during the process of selecting speech-language therapy students, may also have a significant impact on their eventual service delivery within their communities.

However, while it is crucial that the best possible candidates are appointed to serve their community, this service is simply not possible if there are no posts available. This lack of posts lies at the heart of several of the aforementioned challenges, such as the lack of time and overwhelming caseload. Participant C wistfully described how much more she could be offering her patients if more therapists were appointed: "So that's why I think appointing more therapists everywhere, but especially in the clinics is so important... If there are enough therapists, and the therapists then have more time, then they can do more for their patients, like home visits, and really make the therapy practical for them." Thus, the creation of more posts, especially in key settings such as community health clinics, could result in a two-fold improvement of the therapist's service delivery capabilities, as well as the increased and expanded services that the patients could then receive. Interestingly, the aforementioned lack of available posts may also be compelling qualified SLT's to look to the private sector in an effort to find employment. While the statistics regarding the exact disparity between the number of public sector SLT's and private sector SLT's is not readily available, one may look to the fields of medicine and occupational therapy for examples of similar imbalances. In the case of medical professionals, it has been estimated that only 30% of doctors are currently employed in the public healthcare sector (Mayosi and Benatar, 2014). According to the study by Ned, Tiwari, Buchanan, Van Niekerk, Sherry, and Chikte (2020), only 11% of the occupational therapists employed in the Western Cape were working in the public sector.

A second improvement that has been suggested by several of the participants is the hosting of ECI group therapy sessions. Not only would these group sessions help to address the time constraints experienced by many therapists by combining 3-4 individual patient sessions into one group session, but they would also provide an opportunity to foster supportive relationships among parents or caregivers who are on similar journeys with their children. A particularly striking quote came from one of the participants regarding group sessions: "Ek dink dit, ek dink een-tot-een kan partykeer intimiderend wees vir 'n ouer…ek dink 'n groep het 'n heeltemal ander dinamieka. Jy kan ervarings deel, en dan is daar daai element van ondersteuning tussen die ouers ook." (Translated: "I think one-to-one sessions can sometimes be intimidating to parents…with a group you have a whole other dynamic. In a group you can share experiences, and then there is that element of support among the parents.") In fact, one may expect that such a group setting could potentially reduce the challenges presented by the cultural differences between the therapist and the caregivers, as well as shift the balance of power back into the caregivers' hands. Finally, several participants indicated that other team members, such as rehabilitation care workers, could be trained to lead supplementary group language stimulation sessions that could be offered concurrently with formal speech therapy sessions.

The crucial role that the various team members have to play is further emphasized with regards to the suggested improvements to the current service delivery. Two of the participants discussed involving other healthcare professionals as team members in the pursuit of communication health by means of stronger referral networks, as well as holistic service delivery in the context of multi-disciplinary intervention. However, what was remarkable about the dialogue surrounding this particular subtheme was the emphasis on moving ECI service delivery out of the hospital and into the client's home. For example, Participant D suggested the following, "And I think getting moms who have gone through similar things with their children to train each other would also help, even though each speech problem is different, I think it would be so much more valuable for a mom of a child with CP to train another mom with a child with CP, showing on her child how she feeds him for example." Several other participants stressed the training of rehabiliation care workers to improve compliance with home programs, provide supplementary group stimulation sessions, and assist with regards to follow-up. Participant C remarked, "I think ECI needs to happen at home. It shouldn't be something you bring your child to the hospital to take care of. I think

what the government is doing in terms of home-based care is fantastic. They [rehabilitation care workers] do the screening and they are trained to try and find early signs of problems with development and so on. Then the family must be referred to the community clinic, if the home-based carer is not enough."

With regards to health promotion, this aspect of service delivery may be considered to form part of the broader health literacy education of the public, and may go hand-in-hand with role-player training. Therefore, the participants' suggested improvements regarding these two topics will be discussed simultaneously. In this study, the term "health promotion" was used to describe strategies and interventions designed to protect and improve an individual's health and prevent ill health (WHO, 2016). The prevention of ill health may be thought to include efforts that aim to prevent developmental delays, which may later pose a risk to a child's optimal development and holistic health. As earlier discussed in the literature review, SASLHA (2011) stated, "Adequate feeding, hearing and communication abilities are basic to the quality and enjoyment of a young child's health, development, social participation and education." Thus, the community education programs and role-player training discussed by the participants, may be considered health promotion. The majority of the participants in this study highlighted a need for improved knowledge and awareness among not only the members of the community and caregivers, but also among other healthcare practitioners. While the misinformation of colleagues regarding the consequences of communication delays and the importance of early identification was previously identified as a distinct challenge to optimal service delivery, only one of the participants suggested efforts to improve the health promotion practices of these colleagues. She explained that her sub-district has prioritized training of role players "…so that everybody is informed to whom to refer, how to refer, and how to give parent training on the basic things. And also what we're doing now is we're doing training with all the crèche teachers, so not only for when the child gets to the crèche at 3 or 4 years old, but when they are there from 1 already. So then they get training on speech and language milestones, on motor milestones, oral hygiene practices, and then they also get a stimulation book. And afterwards they write a test as well to see if they've listened to everything. We do these sessions about three times a year..."

While efforts have been made to formally address the issue of health promotion on a national scale by programs such as the First Thousand Days initiative (Western Cape Government, 2020) and the Road to Health Booklet (South African Government, 2011), Participant A

pointed out that simply giving the caregivers a pamphlet or a booklet does not ensure that they understand its purpose or its value. She suggested incorporating the booklet into an interactive group information session between a health staff member and the attendees of antenatal clinics, for example, to maximize the benefit and use of the printed resources. Another participant also suggested training and information sessions with regards to developmental norms, so that caregivers can identify red flags, as well as language stimulation training by means of book reading, for example. Such role-player training sessions would not only empower the caregivers to make optimal use of the healthcare resources available to them, but could also serve to bridge the gap caused by long waiting lists. These suggestions form part of an underlying ideology of prevention expressed by several participants with regards to collaboration with the larger community. This prioritization of prevention services is echoed by the research literature, which demonstrates that prevention services are essential in supporting families from underserved communities by means of communication development screening, risk assessment, parental training, and general developmental monitoring (Claassen, Pieterse, Van der Linde, Kruger, and Vinck, 2016).

The participants' suggestions regarding the more macro-level challenges, namely those presented by sub-optimal infrastructure and management, will be discussed together. The participants seemed to consider infrastructure as an aspect of service delivery that is inflexible, and as such only one of the participants suggested a possible improvement. She proposed that the various healthcare practitioners be consulted when new healthcare facilities are designed, because each profession has its own needs and requirements with regards to its facility. She explains, "Infrastruktuur, uhm, [sig], ek dink as nuwe hospitale en klinieke gebou word, moet terapeute gekonsulteer word, en gevra word "Wat het jy nodig?" Ek het 'n kantoortjie nodig, dit kan baie klein wees, maar ek het byvoorbeeld 'n kamer nodig waar ek groepterapie kan doen." (Translated: "Infrastructure, uhm, [sigh], I think when new hospitals and clinics are built, therapists must be consulted and asked 'What do you need?' I need an office, it can be very small, but I need, for example, a room where I can do group therapy.") Regarding management, several participants suggested that improved awareness of the role of the speech-language therapist at managerial level would positively impact their service delivery. Participant G explained, "Ek dink ook bewusmaking van wat 'n spraakterapeut doen, uhm, op bestuursvlak. Ek is bevoorreg dat in ons sub-structure, die "direct line manager" wat ek nou het en die vorige een, weet wat ek doen. So jy hoef nie te gaan

verduidelik hoekom jy nou so iets of so iets kort nie. Maar voorheen was ek al in ‘n situasie waar hulle nie verstaan hoekom jy Boardmaker soek of hoekom jy dit geaktifeer wil hê op jou rekenaar of so nie, so bewusmaking op ‘n bestuursvlak oor wat ons doen, want dit is tog maar hulle wat alles vir ons moet afteken.” (Translated: “I think raising awareness of what a speech therapist does, uhm, on managerial level. I am priviliged that in our sub-structure, the direct line manager that I have now and the previous one knows what I do. So I don’t have to go explain why I need this or that. But previously I have been in a situation where they don’t understand why you want *Boardmaker* or why you want it to be activated on your computer and so on, so awareness at a managerial level of what we do, because after all they are the ones who have to sign off on everything.”)

Ideal ECI Service Delivery

Description of Ideal ECI Service Delivery Characteristics

The participants were asked to consider the reality of their current service delivery, with all of its challenges and facilitating factors, and to describe thereafter what they considered to be ideal ECI services within that context. From the resulting discussions around what could realistically be considered an ideal service, the following components were identified as critically important to distinguishing the current reality from the ideal: early identification of children in need of ECI; improved role-player knowledge; health promotion within communities; multi-disciplinary collaboration toward common therapy goals; and finally, adaptions to the therapy process.

A defining characteristic of ideal service delivery that emerged from these discussions was that of early identification. The participants mentioned the screening of babies and toddlers for possible speech and language delays, as well as hearing loss and feeding difficulties as an important component of ECI services that would ideally be implemented in all settings.. The importance of health promotion within ideal ECI service delivery will be discussed in more detail later in this chapter. By prioritizing early identification, a diagnosis could be obtained sooner, and the child could then be placed in the appropriate referral channels as early as possible. Given how overwhelmed these channels can be within the public healthcare setting, it stands to reason that entering the system as soon as possible would increase one’s chance of receiving the necessary services.

Several participants also discussed the value of early identification, and the resulting earlier treatment, in minimizing or even avoiding future complications secondary to the child's communication delay or disorder. These future complications include aspects like school placement and alternative and augmentative communication devices or strategies. Participant F summarized her perspective regarding early identification, "So early identification in an ideal service is always what you're working towards." This emphasis on the significance of early intervention, especially as it relates to the outcomes for the patient, is strongly echoed in the research discussed in the literature review. According to SASLHA (2011), studies have shown that intervention during the critical period may have a positive effect on the development of the child's brain, while Kritzinger, Louw and Rosetti (2001) point out that parental involvement and early identification can be strong predictors of the effectiveness of intervention services.

Secondly, ideal ECI service delivery as perceived by the participants includes a focus on health promotion and role-player knowledge as defining characteristics. The participants described health promotion among the community members with a specific emphasis on developmental norms, resulting in caregivers who know what to expect of their child's developmental journey, and who may be better equipped to recognize when the child has deviated from typical development. As early identification has been demonstrated to be a crucial component of effective ECI services, one may be reminded that family members play a critical role in this domain, as they are ideally situated to notice delays as soon as possible, and then act as the referral agent to bring the child to the attention of healthcare professionals (King, Rosenberg, Fuddy, McFarlane, Sia, and Duggan, 2005). Participant F pointed out, "So we first need to educate the community on the milestones and what they need to look out for, uhm because we don't want a 3 year-old walking in using single words only. Then you've lost quite a bit of time." Another component of community health promotion that came to light was that of language stimulation as a preventative measure – Participant F described how she would like to include training regarding book reading to her community in an ideal service delivery at her institution.

As to role-player knowledge, the two most prominent aspects that emerged were those of caregiver insight and appropriate referrals from colleagues in other healthcare professions. As discussed earlier in this chapter, participants described caregiver insight as a significant obstacle to effective speech-language therapy services, as the common misperception

identified by several participants is that the caregiver does not have an active role to play in realizing the therapy goals. To this end, participants described caregiver insight into the therapy process, including the purpose and value of therapy, as well as their crucial role in that process to be components of an ideal ECI service. Secondly, improved awareness among colleagues within the healthcare setting regarding the role and scope of the speech therapist was highlighted as a component of improved role-player knowledge that may result in more appropriate referrals. These appropriate referrals, in turn, could lead to more patients receiving the necessary services, and fewer patients on waiting lists for services that they may not need. Participant A also remarked that appropriate referrals may furthermore alleviate the impossible burden of trying to screen a large population of children.

With regards to team members, both within the healthcare context and in other settings, multi-disciplinary collaboration has been identified as a characteristic of ideal service delivery. A prominent aspect that the participants discussed was that of simultaneous input from an array of professionals, such as the occupational therapist, dietitian, and sometimes the physiotherapist or the oral hygienist, all working collaboratively toward a common goal. This collaborative approach to service delivery was typically described within the context of group therapy sessions. In the education setting, collaboration with the preschool educator was described as an important component of multi-disciplinary service delivery. This included training the educator to perform screenings, as well as working together to support the child in the classroom context. The abovementioned emphasis on a team-based approach to intervention is in agreement with one of the key principles governing optimal ECI services as defined by SASLHA (2011). In fact, these principles go so far as to point out that "…The golden standard for the challenging task of infant-toddler assessment within a family-centered framework, is a transdisciplinary play-based arena assessment..." (SASLHA, 2011, p. 14).

Finally, the participants described the following adaptions to the therapy process and practices as characteristics of an ideal ECI service: an increased number of therapists and therapy resources; a combination of group and individual therapy sessions; and integrating speech therapy into other domains of the child's life. The first component was discussed in relation to the more macro-level challenges, such as the overwhelming caseload faced by the participants, as well as the often-limited resources made available to them. Several participants indicated that an increase in the number of therapists appointed to the various districts would have a positive effect on their waiting lists, as well as allow them to provide

more services, such as home or school visits, and more frequent therapy sessions to each patient. The resources the participants referred to include accessible and appropriate therapy spaces, as well as resources to provide further treatment, such as printed home programs and children's books to offer caregivers. The second component was identified as a "best of both worlds" approach to therapy, whereby the benefits of group sessions and individual sessions could be maximized to the advantage of the patient. The final component refers to the desire that several participants expressed to be able to visit the patient at home and at school, with the hope of achieving a more holistic and individualized therapy plan for each patient. In this way, compliance with home programs may also be improved, as this may lend an opportunity to produce an even more individualized and child-centered intervention service, as recommended by SASLHA (2011).

Expected Outcomes of Ideal Service Delivery

The participants' expectations regarding the possible outcomes of an ideal ECI service were two-fold, with the expected outcomes for the clients representing one distinct subtheme that emerged, and the expected outcomes for the therapists representing another subtheme. With regards to the expected outcomes for the clients, the following aspects came to light: decreased severity of the delay or disorder and the resulting secondary complications; optimal functioning in society; school readiness; and improved insight and buy-in regarding the therapy process. Several of the participants especially emphasized school readiness as a key outcome that may result from their ideal service delivery, and highlighted factors such as literacy skills, appropriate school placement, and later academic success as the potential results for their clients. As discussed in the literature review section, "Language ability in early childhood is the single best predictor of school readiness and later school success" (Hirsh-Pasek, Adamson, Bakeman, Owen, Golinkoff, Pace, Yust, and Suma, 2015). Early communication intervention may have far-reaching effects when it comes to a child's academic outcomes and future opportunities.

In respect to the decreased severity of the delay or disorder, two particular issues came to light, namely: earlier identification of possible communication difficulties, and limited progression of the communication difficulties that are identified. This expectation is in line with the current research that shows that early identification can significantly diminish the potential effects of a communication delay (Van der Linde, Swanepoel, Sommerville, Glascoe, Vinck, and Louw, 2016). Secondary complications were also expected to be

decreased, as Participant C explained, "...it would have a big impact on educational outcomes, and school placement, and then developing associated behavioural issues, and frustration, social issues, caregiver discipline problems, and all of that. It's so much bigger than just language." Her sentiments are echoed by the current research, which shows that parents of children with communication delays are four times more likely to report behavioural problems than parents of typically developing children. (Horwitz, Irwin, Briggs-Gowan, Bosson-Heenan, Mendoza, and Carter, 2003). A study conducted by Roberts, Curtis, Eastbrook, Norton, Davis, and Burns (2019) pointed to a relationship between delayed early communication abilities and disruptive behaviours in children as young as 18 months of age. These children, who present with delayed communication skills, are also shown to be more likely to withdraw from socialization, as well as to be bullied by their peers. (Olswang, Rodriguez, and Timler, 1998; Kaiser and Roberts, 2012) Thus, the expected result would not only be that of reduced or resolved communication delays as the primary difficulty, but also the minimization or avoidance of resulting complications. In fact, this expectation is supported by the research conducted by Curtis, Kaiser, Estabrook and Roberts (2017), who demonstrated a significant decrease in problem behaviours following 12 months of parent-led language intervention.

Another factor of ideal ECI service delivery expected to affect the clients is that of optimal functioning in society. The discussion surrounding this factor revealed that the participants expected the clients to be able to participate fully within the various domains of their individual lives, such as their home or their school environments. Participant A highlighted the ability to communicate basic needs and participate in the classroom as integral components of optimal functioning, while Participant D pointed out that she expected effective communication by verbal or by alternative and augmentative means to be the optimal result. The expected end result of optimally functioning children, as described by the participants, was fully functional adult members of society. This expectation is supported by the research which demonstrated that the majority of people presenting with a history of communication impairments are not involved in employment, formal training, or education by the time they are 19 years of age (Norbury, 2015). This particular expected outcome also echoes the perspective of Tosh, Arnott, and Scarinci (2016) that early speech and language intervention is valuable in relation to the individual and his/her society at large.

The final of these expected outcomes relates to how ideal ECI services may have a greater potential to lead to improved caregiver insight with regards to the purpose and value of therapy, as well as improved buy-in with regards to the therapy process. Participant G explains, "Vir die pasient, dink ek hulle gaan meer inkoop in terapie, as dit meer aanloklik is en meer van toepassing is op hulle, uhm, so ek dink ons gaan beter resultate kry in terme van ons pasiente, en ek dink hulle sal ook bewusmaking doen as hulle 'n uitsekende diens kry waarmee hulle tevrede is, dink ek hulle sal vir baie ander mense vertel." (Translated: "For the patient, I think they will buy into therapy more… uhm, so I think we will get better results in terms of our patients, and I think they will also raise awareness if they receive an excellent service that they are satisfied with, I think they will tell lots of other people…") This quote illustrates the relationship between ideal ECI services and caregiver insight and investment into therapy, which could have a significant impact on several other factors, such as clients raising awareness within their communities, as well as potentially improved therapy outcomes.

As to the expected outcomes for the therapists, the participants unanimously agreed that an ideal ECI service would result in a decreased caseload for each individual therapist. This, in turn, was expected to result in an ECI service that runs more smoothly as the therapist may have more time to spend on administrative duties and with each individual client, as well as a decrease in the waiting lists and resulting waiting periods. Participants also expected to experience increased satisfaction with their work as a result of the expected increase in positive therapy outcomes for their clients, and the ability to discharge more clients who have successfully completed their therapy journey. Finally, several participants described a desire to do more for their clients and the community they serve by expanding their services with regards to establishing programs such as a book reading initiative, empowering the community by means of health promotion, and offering home or school visits to their clients. The following quote from a participant encapsulates this desire: "Then we can start focusing more on prevention than cure, and educate the parents even before birth on how to have a healthy pregnancy, and developmental milestones and all of that. So that would be amazing, if we can start getting ahead of the problems before they develop."

Summary of the main findings

Main differences between current and ideal ECI

The findings of this study represented a clear contrast between the current realities that ECI interventionists faced and the ideal service delivery to which they strived. The participants' overall experience of ECI service delivery was characterized by considerable pitfalls with regards to the healthcare system and the community. In relation to the healthcare system, the long waiting lists for services; the understaffed departments and overburdened therapists were three of the most conspicuous pitfalls. As discussed in the literature review, it is estimated that each SLT currently registered in South Africa is responsible for providing services to approximately 19, 188 South Africans (Statistics South Africa, n.d.). With regards to the ECI team, SLTs were dependent upon colleagues as referral agents, but collaboration among colleagues for the purpose of ECI was not common practice. Inclusion of the caregivers as crucial members of the ECI team also seemed to be fairly limited. Both the lack of collaboration among team members and the exclusion of caregivers from the ECI team were in contrast to the key principles set out by SASLHA (2011), which states that intervention services are centered on the family and that a team-based approach is crucial.

Resources, such as linguistically and culturally appropriate assessment tools were lacking, and logistical factors such as inadequate therapy space further limited ECI services. On the part of the community, caregivers of young children often had limited insight into the need for early intervention and the role that they have to play in therapy. This is troublesome as a delay in communication development may impact a child's quality of life across all domains (Larney, 2002) and communication delays are the most common delay in early childhood (Broomfield and Dodd, 2004). Furthermore, these caregivers were also often uninformed regarding stimulating and supporting typical communication development, as well as potential hazards, such as excessive screen time.

In contrast, ideal ECI service delivery was described in terms of early identification of children in need of ECI and multi-disciplinary collaboration toward common treatment goals. As discussed previously, early intervention and subsequent follow-up services can greatly diminish the potential effects of a communication delay (Van der Linde, Swanepoel, Sommerville, Glascoe, Vinck, and Louw, 2016). Other key characteristics described by the

participants included improved knowledge on the part of the caregivers and other healthcare professionals, health promotion within communities, and finally, several adaptions to the therapy process. These adaptions included an increased number of therapists and therapy resources, a combination of group and individual therapy sessions, and active integration of speech-language therapy into other domains of the child's life. Incorporating intervention into the child's natural environment represents the second key principle as described by SASLHA (2011).

The participants of the study expected this ideal ECI service delivery to result in a multitude of improved outcomes for the clients, including decreased severity of the delay or disorder and the resulting secondary complications, optimal functioning in society, and school readiness. On the part of the caregivers and other role-players, ideal ECI service delivery was expected to yield improved insight and buy-in regarding the therapy process. This expectation is supported by Kaiser and Roberts (2012, p. 305), who remind us "Teaching and supporting partners (parents, caregivers, teachers, and peers) are essential to successful child communication intervention."

At the level of the individual therapist, ECI service delivery was described by the participants in terms of general dissatisfaction due to the overwhelming caseload, time constraints, limited resources, and individual training needs. In contrast, the participants characterized ideal ECI service delivery at this level as including a smaller caseload, and resulting in the therapist having more time to spend on administrative duties and with each individual client, as well as a decrease in the waiting lists and resulting waiting periods. Participant F explained: "Uhm, I think in terms of the service, obviously the service would run smoother, there'd be less of a waiting time to get into the service, but overall I think I would have more time to do education, and prevention and promotion, and training, even if it's training the rehab care workers, which I really don't have time for at the moment. And admin, even admin and reports and things, I think I would definitely get to all of those on time."

Several participants also indicated possible increased satisfaction with their work as a result of the expected increase in positive therapy outcomes for their clients, and the ability to discharge more clients who have successfully completed their therapy journey. Finally, the perception of several of the participants was that they may be able to expand their services

within their communities by establishing literacy initiatives, empowering the community by means of health promotion, and offering home or school visits to their clients.

Challenges and facilitators

As discussed earlier in this chapter, SLTs in the South African public sector are confronted by a myriad of challenges stemming from both the macro-level and individual level. However, when viewed in relation with the facilitating factors to good service delivery highlighted by the participants, several interesting relationships emerged. Two of the most crucial facilitating factors in terms of mitigating the challenges faced were the use of ECI groups and partnerships with other team members. The use of ECI groups may potentially improve service delivery on the part of the therapist by mitigating the challenges of the large caseload and time constraints. By providing services in a group setting, the SLT may be able to use a shorter span of time, such as a single appointment, to reach a greater number of clients simultaneously.

Furthermore, group-based ECI services may also decrease patient-related challenges such as the socio-economic difficulties in terms of transportation costs. This aspect was particularly noteworthy due to the overall limitations of a child's access to healthcare services imposed by the widespread poverty that is prevalent in the country (Samuels, Slemming and Balton, 2012). To this end, a client (and his/her caregiver) might attend one group session per month instead of weekly individual appointments. While weekly therapy sessions may be a more effective approach with regards to the rate of progress, this option is often not feasible in the context of the various challenges faced, such as the vastly overburdened public healthcare system. (Kaipa and Peterson, 2016). Thus, the monthly group sessions may serve to pool the SLT's and the clients' resources in order to support the therapeutic process. The group setting also provides an opportunity to mitigate the effects of a cultural and/or linguistic mismatch between the therapist and client, whereby other members of the group could potentially assist in bridging the communicative or cultural gap and thus making the ECI services more accessible and appropriate.

The second main facilitating factor in the participants' perception, namely partnering with ECI team members, could potentially play a significant role in further alleviating some of the burden on the SLT. By training healthcare professionals, such as rehabilitation care workers,

and other potential team members, such as preschool educators, to facilitate carry-over of therapy goals and techniques, the SLT could create opportunities for role-release. In this way, ECI service delivery is more efficient as a result of the limited time available to the SLT being used to serve an increased number of clients, and it is also more readily available as a result of the number of team members who are able to fulfill some of the roles. Additionally, the challenges of transportation costs may be further reduced as a result of fewer follow-up appointments with the SLT. ECI team members may also represent the client's linguistic and cultural group and could further serve to mitigate the possible cultural or linguistic mismatch between the SLT and the clients. Finally, in conjunction with the group-based services, one may begin to see an improved level of buy-in on the part of the various role-players, as members of their own community share in and contribute to the intervention experience.

At the macro-level, the following challenges emerged from the findings as those most in need of being addressed: governmental policy regarding the number of posts available and the procedures for appointing new candidates, awareness regarding the value of ECI, and culturally and linguistically appropriate materials for the population being served. As discussed extensively in this chapter, the dire need for more public sector posts to be made available and filled by the best candidates for each given community cannot be overstated, and could affect an immense change in the challenges faced by SLTs. This need is closely tied to the necessity for improved awareness regarding the benefits and importance of ECI among members of the general public and healthcare professional colleagues alike. According to Tosh Arnott, and Scarinci (2016), "Effective intervention for children with speech and language difficulties is an important investment at both the individual and societal levels." An improved understanding of the difference that ECI can make to a child over his/her entire lifespan may also assist in motivating the abovementioned policy changes.

Finally, the development of culturally and linguistically appropriate assessment tools and materials has a crucial role to play in providing communities with the best possible services and producing the best possible outcome for each client. Assessment is the cornerstone of intervention, but a substantial shortage of culturally and linguistically appropriate assessment instruments and materials appropriate to the South African context is clearly evident (Chambers, Stronach, and Wetherby, 2016). One is reminded that access to services in the client's language of preference or proficiency is considered a human right, and is thus of paramount importance (Pascoe, Klop, Mdlalo, and Ndhambi, 2017).

Achieving ideal ECI service delivery

As is evident from the findings discussed in this chapter, ECI in the Western Cape province is complex and multifaceted, fraught with challenges but filled with passionate and dedicated interventionists. It is clear that many facilitating factors were present within this field which serve to mitigate the severity of its challenges, and several suggested improvements may further pave the way for an ECI service that more closely resembles the ideal. Initiatives, such as the community service program for health professions graduates, attempt to improve access to health services in areas where these have historically been (and continue to be) very limited. However, until the underlying pitfalls can be addressed and resolved, it seems unlikely that a truly ideal ECI service will be fully realized. With regards to the underlying pitfalls, the previous section highlights the three main challenges in dire need of being addressed. It stands to reason that taking steps toward addressing these challenges could result in large strides being made towards an improved ECI service in the Western Cape.

While it may be unlikely that ideal ECI service delivery will be fully achieved in every sense of the term, it remains the duty of each SLT to strive towards this ideal and advocate for the necessary changes in order to realize the fullest potential of ECI service delivery. A following section includes several recommendations based upon the findings of this study that may further support the realization of a more ideal ECI service for the SLTs and the communities that they serve. However, this study itself was not without challenges and limitations, which will be discussed in the following section.

Limitations of the Study

The following limitations arose during the course of this study: challenges surrounding the approval of the governing bodies, such as the Western Cape Department of Health and the City of Cape Town Municipality, to conduct the study; and a small sample size due to several potential participants who declined as a result of time constraints. With regards to the approval process, only 12 of the 33 potential research sites were included in the approval granted by the Western Cape Department of Health and City of Cape Town municipality. The potential sites included tertiary hospitals, psychiatric hospitals, community hospitals, and community clinics. Of these 13 sites that the Western Cape Department of Health and City of

Cape Town municipality approved for participation in the study, only 9 had a speech therapist employed as a part of their staff. Furthermore, one of the approved sites was a tertiary hospital with a large speech therapy department that specialized in the treatment of adult patients, and thus did not provide ECI or other paediatric services as part of their service delivery. Finally, 3 potential participants declined participation in the study due to severe time constrains as a result of already overloaded schedules. This limitation was to be expected when one considers the overwhelming strain upon the caseloads of these therapists that has been comprehensively discussed in previous sections. As a result, the sample size of this study was limited to 7 participants who represented the perspectives of the entire population of therapists serving the people of the Western Cape province. The estimated total population of both audiologists and speech and language therapists in the public sector of the Western Cape at the time of writing was 80, including those who are permanently employed, completing their community service, and sessional workers.

Recommendations

Several recommendations may be made in the light of this study, especially with regards to the current needs and disparities evident in the field of ECI in the public sector. Firstly, with regards to the education and training of SLT's, there is a clear need for the communities that are most in need of our services to be represented by colleagues in our field. A continued emphasis on selecting and training individuals who carry first-hand knowledge about these communities may yield improved service delivery, as these individuals would be the best candidates to serve their communities in a manner that is culturally and linguistically appropriate. This forms an important part of the process of transforming the profession in South Africa.

Secondly, it is recommended that policies be revised at the governmental and institutional level with regards to the availability of public sector posts, as well as the selection procedure for health care employees. The dire need for more SLT's in the public sector has been extensively discussed throughout this study, as well as the overwhelming caseload in need of services. The consequences of ignoring this need were highlighted in the literature review, and may amount to a lifelong negative effect on the quality of life of many children. Should more posts be made available, it is furthermore recommended that potential candidates be considered not only based on training, experience, and performance during the interview, but

also in terms of how well they are equipped to meet the needs of a community at a cultural and linguistic level.

Thirdly, it is recommended that the utilization of rehabilitation care workers as ECI team members and the implementation of group therapy sessions be included into all ECI service delivery programs where such opportunities exist. The value of rehabilitation care workers as members of the ECI team cannot be overstated, as they may have a critical role to play the in carry-over of therapy to the home environment, and also serve to alleviate some of the strain from the SLT. The use of group therapy may furthermore improve service delivery in many settings, as it provides an opportunity for the SLT to reach several clients in a shorter time span, as well as fostering supportive relationships between parents.

Finally, in relation to future research in this area, it is recommended that efforts be made to better understand the issue of effectively addressing the language discrepancies faced by these therapists, as well as to provide them with a set of suggestions or guidelines that may be realistically applied to their various settings. This issue of language barriers in the therapeutic context came to light several times over the course of this study, and as such it is clear that a need exists for further study and problem-solving surrounding this issue. It is also recommended that future research examine how therapists may be supported by their institutions in terms of mental and emotional health, as the daily struggle of trying to serve an overwhelming number of patients with very limited resources and being faced with a multitude of challenges may certainly be expected to take its toll.

Chapter 6: Conclusion

This qualitative research study investigated the perspectives of SLTs providing early communication intervention services within the multicultural and multilingual environment of the Western Cape public healthcare sector. The focus on ECI stems from the fact that "…communication delays are the most common impairment in early childhood" (Van der Linde et. al., 2016) and these delays have been shown to have a far-reaching impact across a child's lifespan (Tosh, Arnott, and Scarinci, 2016). Furthermore, this study aimed to provide a list of recommendations based on the abovementioned perspectives in order to address the underlying pitfalls of ECI service delivery and in the hopes of aiding the development of policies and practice guidelines.

Data was collected by means of face-to-face semi-structured interviews with qualified speech and language therapists that met the criteria for participation in the study, and who provided their informed consent to participate. An interview guide composed of 10 open-ended questions was refined during a pilot study and used to guide the interview process. Each interview was recorded using an audio recording device and then transcribed verbatim onto a word processing document. Finally, the method of "open coding" was applied to the transcripts as informed by the six steps of qualitative data analysis (Creswell and Guetterman, 2019), and findings emerged in the form of several themes and subthemes.

The six themes that emerged from the data are: a description of the current ECI service; the challenges faced by SLTs; facilitating factors for good service delivery; suggested improvements to the current ECI service; the characteristics of ideal ECI services; and the expected outcomes of ideal ECI service delivery. The findings of this study represent a clear contrast between the current realities that ECI interventionists face and the ideal service delivery to which they strive. The following recommendations have emerged from the findings: a renewed emphasis should be placed on training individuals who represent the communities that are being served; governmental and institutional policies regarding the availability of posts should be revised; rehabilitation care workers should be included as ECI team members when possible, and a group therapy approach should be applied when possible; and future research should be conducted in order to address several issues that came to light during this study, such as language barriers and therapist burnout.

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Appendix A: HREC Approval Notice

Approval Notice

New Application

18/03/2019

Project ID : 9272

HREC Reference #: S19/02/044

Title: Perceptions of public service speech-language therapists in the Western Cape regarding early communication intervention

Dear Miss Marisa De Bruin,

The **New Application** received on 19/02/2019 18:34 was reviewed by members of **Health Research Ethics Committee 2 (HREC2)** via **expedited** review procedures on 18/03/2019 and was approved.

Please note the following information about your approved research protocol:

Protocol Approval Period: This project has approval for 12 months from the date of this letter.

Please remember to use your **Project ID [9272]** on any documents or correspondence with the HREC concerning your research protocol.

Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

After Ethical Review

Please note you can submit your progress report through the online ethics application process, available at: Links Application Form Direct Link and the application should be submitted to the HREC before the year has expired. Please see *Forms and Instructions* on our HREC website (www.sun.ac.za/healthresearchethics) for guidance on how to submit a progress report.

The HREC will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

Provincial and City of Cape Town Approval

Please note that for research at a primary or secondary healthcare facility, permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Please consult the Western Cape Government website for access to the online Health Research Approval Process, see: https://www.westerncape.gov.za/general-publication/health-research-approval-process. Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research.

For standard HREC forms and instructions, please visit: Forms and Instructions on our HREC website https://applyethics.sun.ac.za/Project/ViewIndex/9272

If you have any questions or need further assistance, please contact the HREC office at 021 938 9677.

Yours sincerely,

Mr. Francis Masiye,

HREC Coordinator,

Health Research Ethics Committee 2 (HREC2).

National Health Research Ethics Council (NHREC) Registration Number:

REC-130408-012 (HREC1) &REC-230208-010 (HREC2)

Federal Wide Assurance Number: 00001372

Page 1 of 2

Office of Human Research Protections (OHRP) Institutional Review Board (IRB) Number: IRB0005240 (HREC1)/IRB0005239 (HREC2)

The Health Research Ethics Committee (HREC) complies with the SA National Health Act No. 61 of 2003 as it pertains to health research. The HREC abides by the ethical norms and principles for research, established by the World Medical Association (2013) Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects the South African Department of Health (2006). Guidelines for Good Practice in the Conduct of Clinical Trials with Human Participants in South Africa (2nd edition);

as well as the Department of Health (2015). Ethics in Health Research: Principles, Processes and Structures (2nd edition).

The Health Research Ethics Committee reviews research involving human subjects conducted or supported by the Department of Health and Human Services, or other federal departments or agencies that apply the Federal Policy for the Protection of Human Subjects to such research (United States Code of Federal Regulations Title 45 Part 46); and/or clinical investigations regulated by the Food and Drug Administration (FDA) of the Department of Health and Human Services.

Appendix B: Western Cape Government Approval Notice

Western Cape Government
Health

HEALTH IMPACT ASSESSMENT
HEALTH RESEARCH SUB-DIRECTORATE
Health.Research@westerncape.gov.za
tel: +27 21 483 0866; fax: +27 21 483 9895
5th Floor, Norton Rose House, 8 Riebeek Street, Cape Town, 8001
www.capegateway.gov.za

REFERENCE: WC_201903_045
ENQUIRIES: Dr Sabela Petros

Stellenbosch University

Private Bag X1

Matieland

7602

For attention: Ms Marisa de Bruin

Re: **Perceptions of public service speech therapists in the Western Cape regarding early communication intervention**

Thank you for submitting your proposal to undertake the above-mentioned study. We are pleased to inform you that the department has granted you approval for your research.

Please contact following people to assist you with any further enquiries in accessing the following sites:

Valkenberg Hospital	**Mr Michael Vonk**	**044 802 4534**
Mitchells Plain Hospital	**Mr Hans Human**	**021 377 4306**
Witzenberg Sub-District	**Mylcka Solomon**	**023 316 9600**
Stellenbosch Hospital	**Alicia Eksteen**	**021 808 6176**
Karl Bremer Hospital	**Annelie Eksteen**	**021 918 1978**
Northern Tygerberg Sub-District	**Firdows Parker**	**021 815 8882**
Nolungile CDC	**Bulelwa Gaji-Mbunge**	**021 387 4230**
Overberg District	**Lindrey Davids**	**028 214 5876**
Wesfleur Hospital	**Dr Ziefred McConey**	**021 571 8052**
Witzenberg Sub-District	**Mylcka Solomon**	**023 316 9600**

Kindly ensure that the following are adhered to:

1. Arrangements can be made with managers, providing that normal activities at requested facilities are not interrupted.
2. By being granted access to provincial health facilities, you are expressing consent to provide the department with an electronic copy of the final feedback (**annexure 9**) within six months of completion of your project. This can be submitted to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
3. In the event where the research project goes beyond the *estimated completion* date which was submitted, researchers are expected to complete and submit a progress report (**Annexure 8**) to the provincial Research Co-ordinator (Health.Research@westerncape.gov.za).
4. The reference number above should be quoted in all future correspondence.

Yours sincerely

DR M MOODLEY

DIRECTOR: HEALTH IMPACT ASSESSMENT

DATE: 13 - 05 - 2019

Appendix C: Approval Notices from the Institutions

Western Cape Government
Health

TYGERBERG HOSPITAL
REFERENCE:
Research Projects
ENQUIRIES: **Dr GG Marinus**
TELEPHONE:**021 938 5752**

Project ID: 9272

Ethics Reference: S19/02/044

TITLE: **Perceptions of public service speech-language therapists in the Western Cape regarding early communication intervention.**

Dear Miss Marisa De Bruin

PERMISSION TO CONDUCT YOUR RESEARCH AT TYGERBERG HOSPITAL.

1. In accordance with the Provincial Research Policy and Tygerberg Hospital Notice No 40/2009, permission is hereby granted for you to conduct the above-mentioned research here at Tygerberg Hospital.

2. Researchers, in accessing Provincial health facilities, are expressing consent to provide the Department with an electronic copy of the final feedback within six months of completion of research. This can be submitted to the Provincial Research Co-Ordinator (Health.Research@westerncape.gov.za).

DR GG MARINUS
MANAGER: MEDICAL SERVICES

DR D ERASMUS
CHIEF EXECUTIVE OFFICER
Date: 4 June 2019

Administration Building, Francie van Zijl Avenue, Parow, 7500 Private Bag X3, Tygerberg, 7505
tel: +27 21 938-6267 fax: +27 21 938-4890 www.capegateway.go.v.za

Western Cape Government
Health

GROOTE SCHUUR HOSPITAL

Enquiries: Dr Bernadette Eick
E-mail : Bernadette.Eick@westerncape.gov.za

Ms. Marisa De Bruin
STELLENBOSCH UNIVERSITY

E-mail: marisdebruinslt@gmail.com

Dear Ms. De Bruin,

RESEARCH PROJECT: Perceptions Of Public Service Speech-Language Therapists In The Western Cape Regarding Early Communication Intervention

Your recent letter to the hospital refers.

You are granted permission to proceed with your research, which is valid until **18 March 2020.**

Please note the following:

a) Your research may not interfere with normal patient care.
b) Hospital staff may not be asked to assist with the research.
c) No additional costs to the hospital should be incurred i.e. Lab, consumables or stationary.
d) **No patient folders may be removed from the premises or be inaccessible.**
e) Please provide the research assistant/field worker with a copy of this letter as verification of approval.
f) Confidentiality must always be maintained .
g) Should you at any time require photographs of your subjects, please obtain the necessary indemnity forms from our Public Relations Office (E45 OMB or ext. 2187/2188).
h) Should you require additional research time beyond the stipulated expiry date, please apply for an extension.
i) Please discuss the study with the HOD before commencing.
j) Please introduce yourself to the person in charge of an area before commencing.
k) On completion of your research, please forward any recommendations/findings that can be beneficial to use to take further action that may inform redevelopment of future policy / review guidelines.
l) Kindly submit a copy of the publication or report to this office on completion of the research.

I would like to wish you every success with the project.

Yours sincerely

DR BERNADETTE EICK
CHIEF OPERATIONAL OFFICER
Date: 3 May 2019

C.C. Mr. L. Naidoo
Ms. R. Lentin

G46 Management Suite, Old Main Building,
Observatory 7925
Tel: +27 21 404 6288 fax: +27 21 404 6125

Private Bag X,
Observatory, 7935
www.capegateway.go.v.za

Appendix D: Participant Information and Consent Form

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF RESEARCH PROJECT:	
Perceptions of public service speech-language therapists in the Western Cape regarding early communication intervention	
DETAILS OF PRINCIPAL INVESTIGATOR (PI):	
Title, first name, surname: Miss Marisa de Bruin	**Ethics reference number:** S19/02/044
Full postal address: 12 Le Avenue de Franschhoek Estate, Franschhoek, 7690	**PI Contact number:** 0799369138

I would like to invite you to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask me any questions about any part of this project that you do not fully understand. It is very important that you are completely satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. In other words, you may choose to take part, or you may choose not to take part. Nothing bad will come of it if you say no: it will not affect you negatively in any way whatsoever. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled to. You are also free to withdraw from the study at any point, even if you do agree to take part initially.

This study has been approved by the Health Research Ethics Committee at Stellenbosch University. The study will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, the South African Guidelines for Good Clinical Practice (2006), the Medical Research Council (MRC) Ethical Guidelines for Research (2002), and the Department of Health Ethics in Health Research: Principles, Processes and Studies (2015).

What is this research study all about?

This study aims to arrive at a better understanding of the experiences of speech-language therapists working with early communication intervention in the public sector of the Western Cape. Participants from all the districts in the province will be invited to participate to better understand the current reality of early communication service delivery, including the challenges and supporting factors experienced by the speech-language therapists. Based on these experiences, a list of recommendations will be drawn up with regards to improving future early communication intervention service delivery, which may be of use to you.

In order to explore your experience as a speech-language therapist delivering an early communication intervention service, an interview will be conducted either face-to-face, over the telephone, or via Skype. There are set questions that will be asked during this interview, and these questions will be provided to you beforehand so that you may have some time to reflect and think about them in relation to your experience. The interview will be scheduled

for a date and time that will be convenient to you and will not interfere with your professional obligations, and in the case of a face-to-face interview, at a location that is convenient to you. The interview will take approximately 45 minutes to an hour to complete.

Why do we invite you to participate?
You have been selected to participate in this study because you have satisfied the following criteria:
You are a qualified speech-language therapist (not a community service therapist)
You are currently employed in the public sector of the Western Cape province
Your current caseload includes early communication intervention / you have recent experience managing early communication intervention cases (within the last 12 months)

What will your responsibilities be?
You will be asked to provide answers to predetermined questions in relation to your personal experience as a speech-language therapist providing early communication intervention services.

Will you benefit from taking part in this research?
This study may benefit you as healthcare practitioner by means of providing you with a list of recommendations that are relevant and specific to your context and challenges. It may also benefit the patients receiving early communication intervention services with improved service delivery in the public sector setting.

Are there any risks involved in your taking part in this research?
Maintaining confidentiality throughout the research process will minimize your personal risk. Any information obtained through the course of this study that could be used to identify you will be kept strictly confidential, and your identity will not be reported in the research documentation.

Will you be paid to take part in this study and are there any costs involved?

There are no costs involved for your participation in this study. You will be reimbursed for your time by means of an invitation to a CPD-accredited event (also available via podcast) that will provide feedback about the findings of the study.

Is there anything else that you should know or do?
You can phone Marisa de Bruin at 079 936 9138 if you have any further queries or encounter any problems.
You can phone the Health Research Ethics Committee at 021 938 9677/9819 if there still is something that your researcher has not explained to you, or if you have a complaint.
You will receive a copy of this information and consent form for you to keep safe.

Declaration by participant

By signing below, I ……..……. agree to take part in a research study entitled Perceptions of public service speech-language therapists in the Western Cape regarding early communication intervention."

I declare that:

I have read this information and consent form, or it was read to me, and it is written in a language in which I am fluent and with which I am comfortable.
I have had a chance to ask questions and I am satisfied that all my questions have been answered.
I understand that taking part in this study is **voluntary,** and I have not been pressurised to take part.
I may choose to leave the study at any time and nothing bad will come of it – I will not be penalised or prejudiced in any way.
I may be asked to leave the study before it has finished, if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan that we have agreed on.

Signed at (*place*) .....….....…….. on (*date*) ……...…….. 2015.

_____ _____

Signature of participant Signature of witness

Declaration by investigator

I *(name)* ……..…… declare that:

I explained the information in this document in a simple and clear manner to ……..
I encouraged him/her to ask questions and took enough time to answer them.
I am satisfied that he/she completely understands all aspects of the research, as discussed above.
I did not use an interpreter.

Signed at (*place*) .....….....…….. on (*date*) ……...…….. 2015.

_____ _____

Signature of investigator Signature of witness

Appendix E: Interview Guide

Semi-Structured Interview Protocol

Demographic Information

Participant Name:	
Age:	
Gender:	M / F
Qualification(s):	
Year of Graduation:	
University/universities where qualification was/were obtained:	
Total years of experience:	
Number of years of ECI service delivery experience:	
Current place of employment:	
Number of years working at current institution:	
Previous place(s) of employment:	

Initial Questions

1. Please tell me about the ECI service delivery currently taking place in your setting.
    a. Probe 1: What procedures or guidelines are used?
    b. Probe 2: Who are the key role players in your setting with regards to ECI service delivery? (Who are involved?)
2. Please tell me about your satisfaction with how ECI services are currently provided at your setting. (Is enough being done?)

Intermediate Questions

3. Please tell me about the challenges that you face with regards to ECI service delivery?

4. How would you suggest that these challenges be addressed?

5. How competent do you perceive yourself to be to deliver ECI services?
    a. Follow-up: Do you have additional training needs in this area?

6. What facilitates ECI service delivery in your experience?

7. How do you think ECI service delivery can be improved in the public sector?

Closing Questions

8. Given the current reality within which service delivery in the public sector takes place, what would ideal ECI service delivery look like in your opinion?

9. What do you think would be the result/outcome of ideal ECI service delivery in the Western Cape public sector?
    a. For example, do you think that improved ECI services could lighten the caseload of later language disorder cases?

10. Are there any additional remarks regarding ECI service delivery that you would like to share with me?